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# WEEKLY WEATHER AND CROP BULLETIN

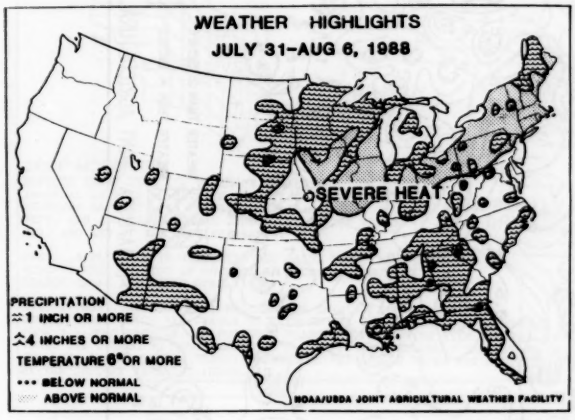
U.S. DEPARTMENT OF COMMERCE
National Oceanic and Atmospheric Administration, National Weather Service

U.S. DEPARTMENT OF AGRICULTURE
National Agricultural Statistics Service and World Agricultural Outlook Board

Volume 75, No. 32 | Washington, D.C. | Aug. 9, 1988

## National Weather Summary

July 31 to August 6, 1988




HIGHLIGHTS: The severe heat spread over the eastern half of the Nation. The Northern States were abnormally hot. A slow moving frontal system triggered severe thunderstorms in the Ohio and upper and middle Mississippi Valleys and Middle Atlantic States. Rain was scattered over the eastern two-thirds of the country, easing drought in some areas.

SUNDAY...The upper Mississippi Valley and northern Plains continued to suffer from extreme heat. Beneficial showers and thunderstorms spread from the upper Ohio Valley into the Northeast. Thundershowers again dotted the Southeast and central and southern Rockies.

MONDAY...A massive high-pressure system dominated the eastern two-thirds of the Nation and brought record heat to the middle and upper Mississippi Valley and upper Great Lakes region. Rain was spread along a stationary front through the northern Plains and upper Mississippi Valley. Thunderstorms continued to be spotty across the Gulf Coast States and the Southwest.

TUESDAY...A large area of hot, humid air was sandwiched between scattered thunderstorms across the Southern States and showers spread along a stationary front running through the northern Plains and upper Great Lakes. Searing heat stretched from the central Plains to the middle Atlantic coast.

WEDNESDAY...Thunderstorms produced severe weather and substantial rain ahead of a slow moving cold front stretching from the upper Great Lakes to the central High Plains. Scattered thunderstorms developed through the South in the hot, moist air flowing northward from the gulf. Hurricane Fabio in the eastern Pacific moved to the northwest toward Hawaii, which was under a hurricane watch.

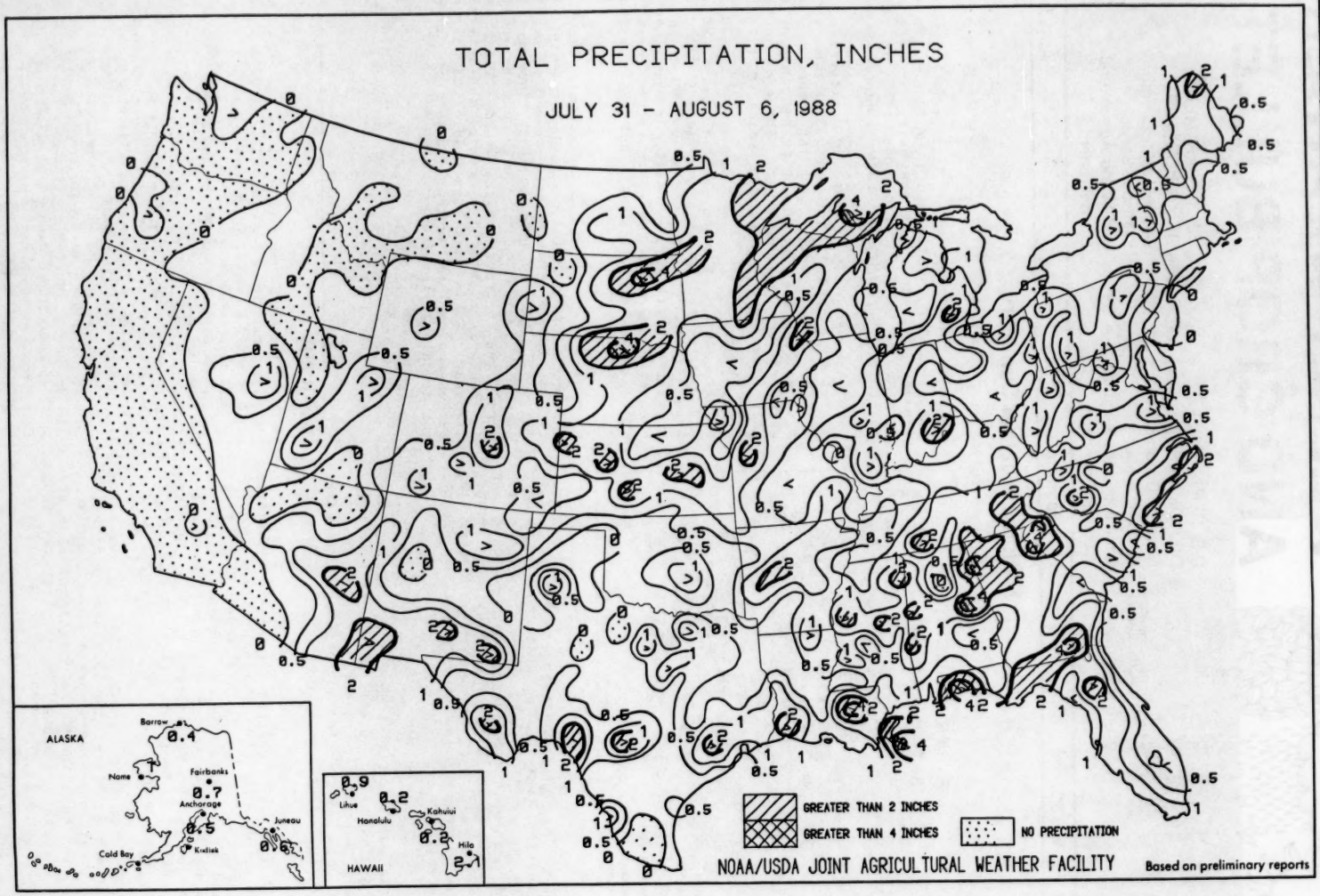
THURSDAY...An intense line of scattered thunderstorms developed in the warm, unstable air ahead of the cold front, extending from Michigan to southeastern New Mexico. High temperature records were set in this same area. Showers and thunderstorms remained across the southern tier of the States.

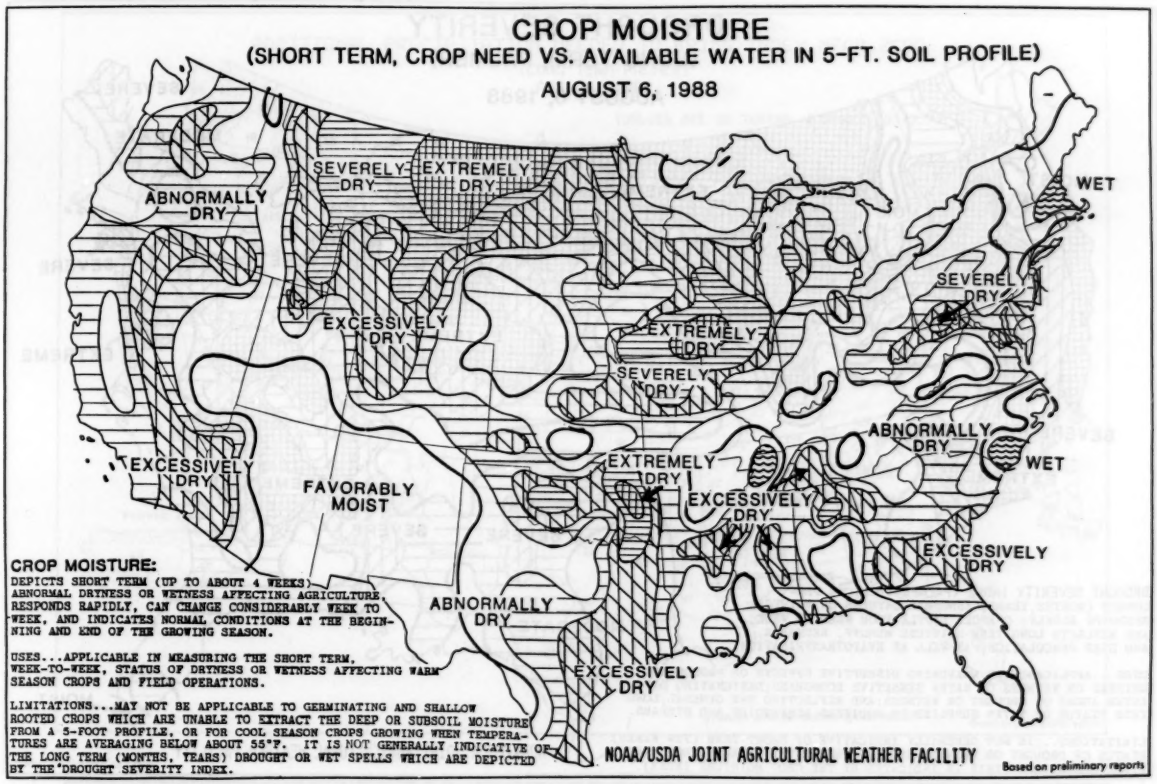
FRIDAY...The cold front edged eastward and continued to trigger showers and severe thunderstorms over the Great Lakes region and Ohio and middle Mississippi Valleys. A small low-pressure system brought showers to the central gulf coast. Fabio still tracked toward Hawaii but was downgraded to a tropical storm.

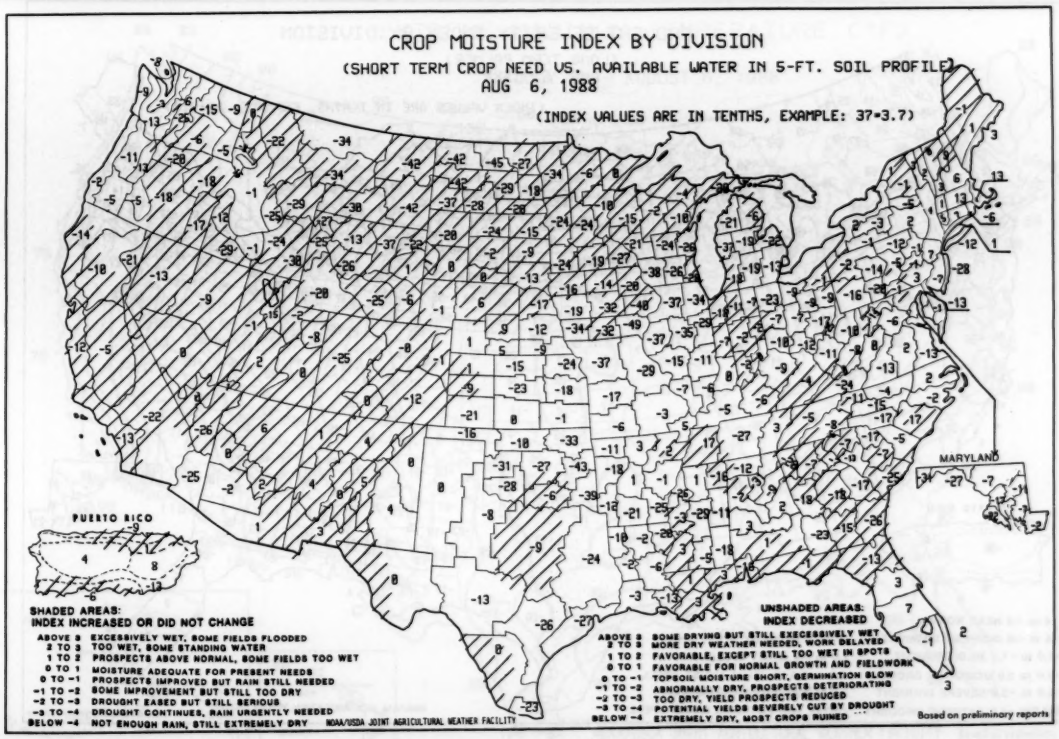
SATURDAY...Showers and thunderstorms continued in the warm, moist air mass ahead of the frontal system, bringing widespread rain to the Atlantic Coast States and Ohio Valley. Showers remained along the central gulf coast. Another front moved across the northern Rockies as scattered showers developed throughout the Rockies and Intermountain Plateau. Fabio was downgraded to a tropical depression, while another depression formed off the midddle Atlantic coast.

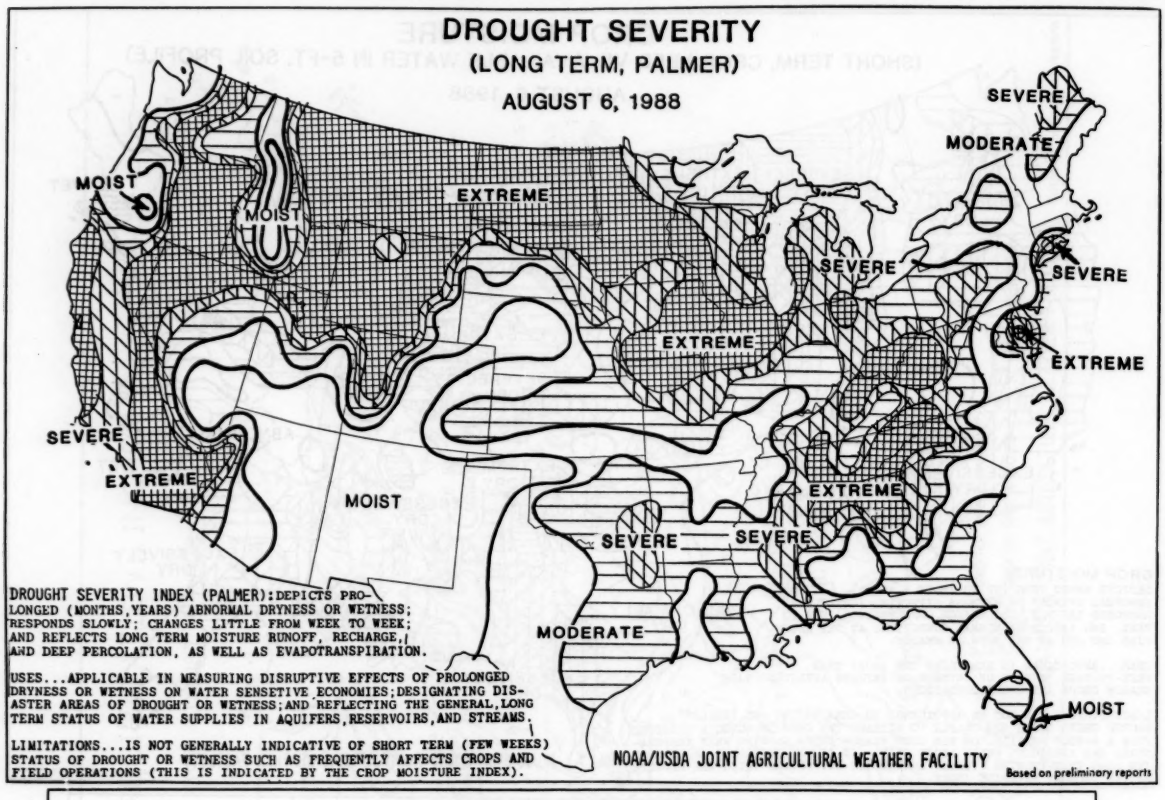
## Contents

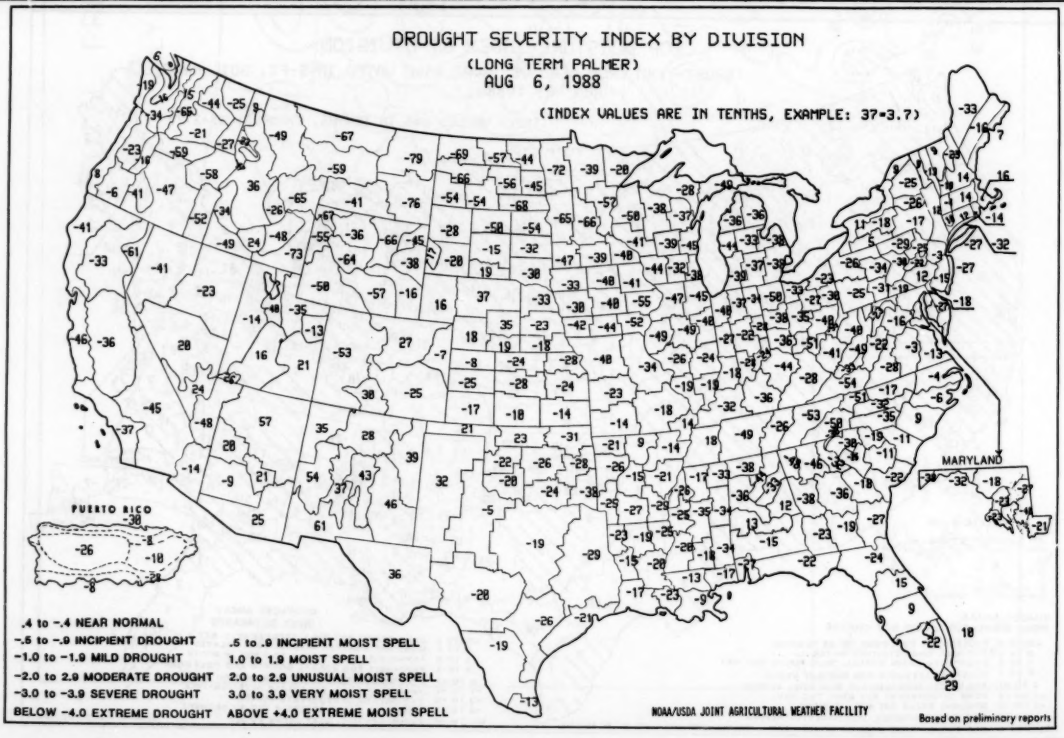
| | Page |
|---|---|
| National Weather Summary | 1 |
| Total Precipitation | 2 |
| Crop Moisture & Crop Moisture Index | 3 |
| Drought Severity & Drought Severity Index | 4 |
| Precipitation Needed to End Drought & Extreme Maximum Temperature | 5 |
| Average Temperature & Departure | 6 |
| Cooling Degree Days Table | 7 |
| Total Growing Degree Days & Departure | 8 |
| National Weather Data for Selected Cities | 9 |
| July Weather and Crop Summary | 12 |
| July Precipitation & Percent of Normal | 13 |
| July Average Temperature & Departure | 14 |
| July Weather Data for Selected Cities | 15 |
| National Agricultural Summary | 16 |
| State Summaries of Weather and Agriculture | 17 |
| Crop Progress & Condition Tables | 23 |
| International Weather and Crop Summary | 25 |
| Subscription and Mailing Permit Information | 28 |

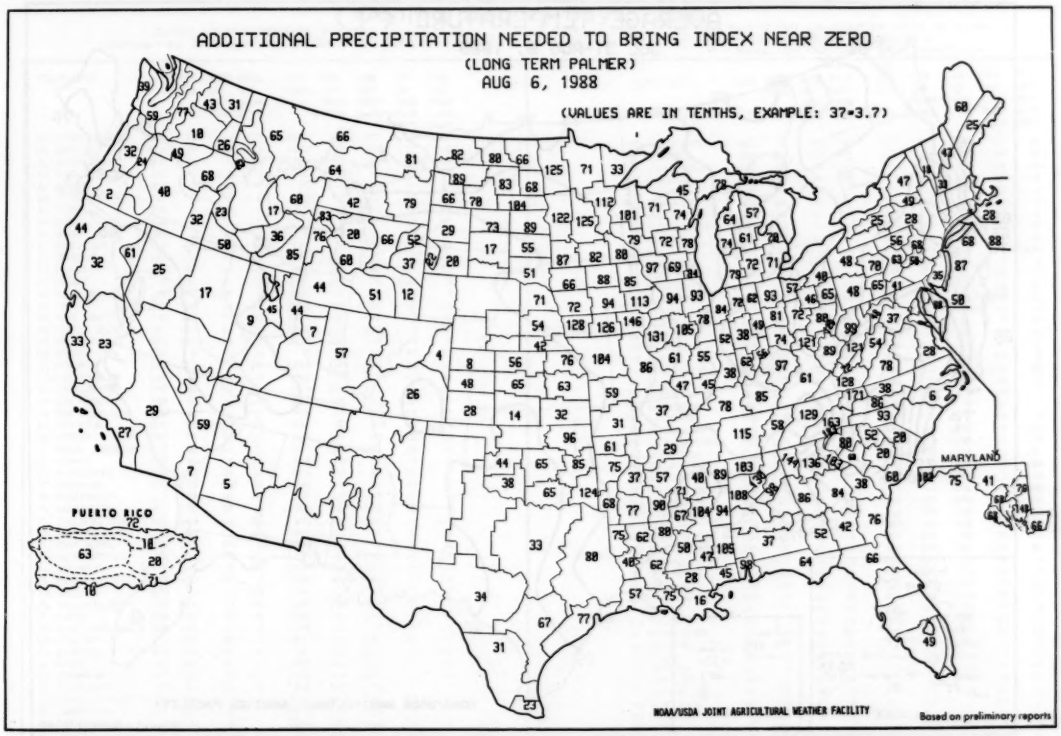

TOTAL PRECIPITATION, INCHES
JULY 31 - AUGUST 6, 1988
ALASKA
Barrow
Nome
Fairbanks
Anchorage
Juneau
Cold Bay
Kodiak
HAWAII
Lihue
Honolulu
Kahului
Hilo
GREATER THAN 2 INCHES
GREATER THAN 4 INCHES
NO PRECIPITATION
NOAA/USDA JOINT AGRICULTURAL WEATHER FACILITY
Based on preliminary reports

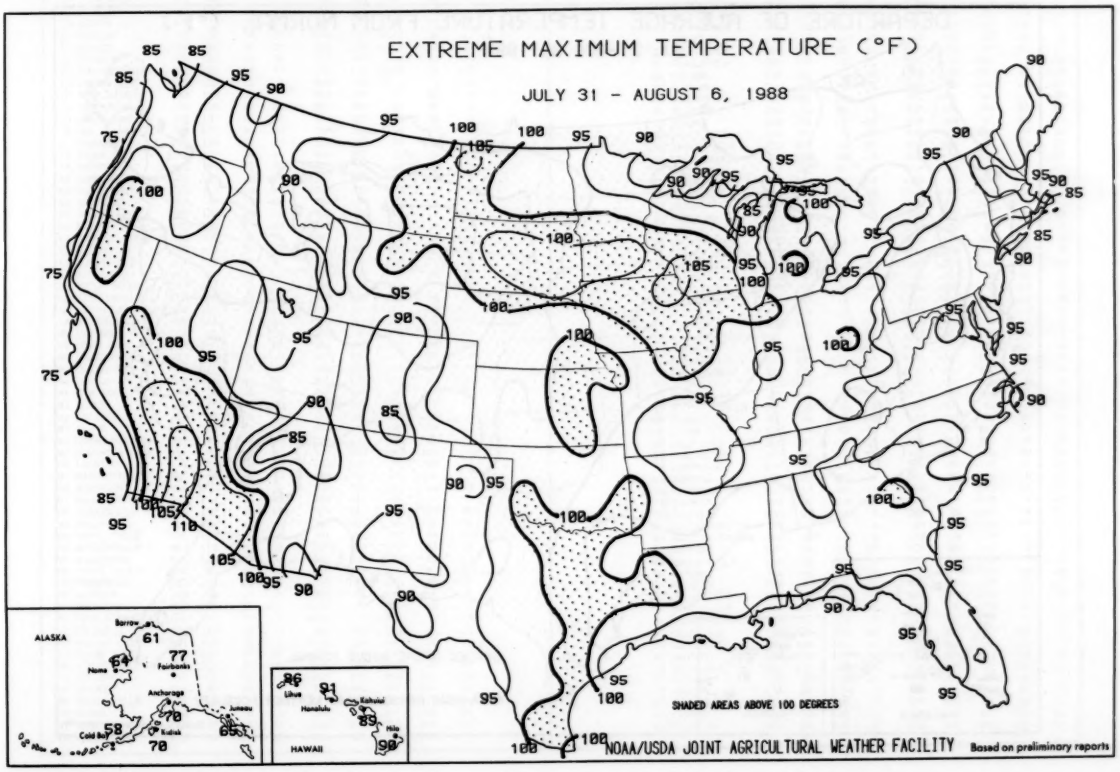

CROP MOISTURE
(SHORT TERM, CROP NEED VS. AVAILABLE WATER IN 5-FT. SOIL PROFILE)
AUGUST 6, 1988
ABNORMALLY DRY
SEVERELY DRY
EXTREMELY DRY
EXCESSIVELY DRY
FAVORABLY MOIST
WET
CROP MOISTURE:
DEPICTS SHORT TERM (UP TO ABOUT 4 WEEKS) ABNORMAL DRYNESS OR WETNESS AFFECTING AGRICULTURE. RESPONDS RAPIDLY, CAN CHANGE CONSIDERABLY WEEK TO WEEK, AND INDICATES NORMAL CONDITIONS AT THE BEGINNING AND END OF THE GROWING SEASON.
USES...APPLICABLE IN MEASURING THE SHORT TERM, WEEK-TO-WEEK, STATUS OF DRYNESS OR WETNESS AFFECTING WARM SEASON CROPS AND FIELD OPERATIONS.
LIMITATIONS...MAY NOT BE APPLICABLE TO GERMINATING AND SHALLOW ROOTED CROPS WHICH ARE UNABLE TO EXTRACT THE DEEP OR SUBSOIL MOISTURE FROM A 5-FOOT PROFILE, OR FOR COOL SEASON CROPS GROWING WHEN TEMPERATURES ARE AVERAGING BELOW ABOUT 55°F. IT IS NOT GENERALLY INDICATIVE OF THE LONG TERM (MONTHS, YEARS) DROUGHT OR WET SPELLS WHICH ARE DEPICTED BY THE DROUGHT SEVERITY INDEX.
NOAA/USDA JOINT AGRICULTURAL WEATHER FACILITY
Based on preliminary reports

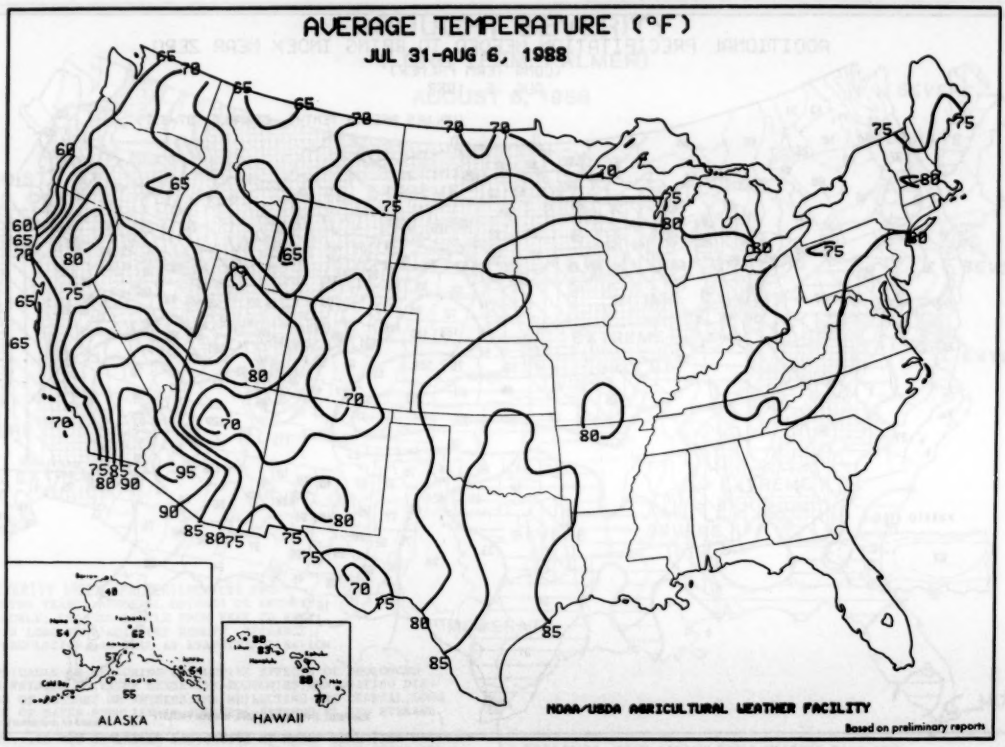

CROP MOISTURE INDEX BY DIVISION
(SHORT TERM CROP NEED VS. AVAILABLE WATER IN 5-FT. SOIL PROFILE)
AUG 6, 1988
(INDEX VALUES ARE IN TENTHS, EXAMPLE: 37=3.7)
PUERTO RICO
MARYLAND
SHADED AREAS:
INDEX INCREASED OR DID NOT CHANGE
ABOVE 3 EXCESSIVELY WET, SOME FIELDS FLOODED
2 TO 3 TOO WET, SOME STANDING WATER
1 TO 2 PROSPECTS ABOVE NORMAL, SOME FIELDS TOO WET
0 TO 1 MOISTURE ADEQUATE FOR PRESENT NEEDS
0 TO -1 PROSPECTS IMPROVED BUT RAIN STILL NEEDED
-1 TO -2 SOME IMPROVEMENT BUT STILL TOO DRY
-2 TO -3 DROUGHT EASED BUT STILL SERIOUS
-3 TO -4 DROUGHT CONTINUES, RAIN URGENTLY NEEDED
BELOW -4 NOT ENOUGH RAIN, STILL EXTREMELY DRY
NOAA/USDA JOINT AGRICULTURAL WEATHER FACILITY
UNSHADED AREAS:
INDEX DECREASED
ABOVE 2 SOME DRYING BUT STILL EXCESSIVELY WET
2 TO 3 MORE DRY WEATHER NEEDED, WORK DELAYED
1 TO 2 FAVORABLE, EXCEPT STILL TOO WET IN SPOTS
0 TO 1 FAVORABLE FOR NORMAL GROWTH AND FIELDWORK
0 TO -1 TOPSOIL MOISTURE SHORT, GERMINATION SLOW
-1 TO -2 ABNORMALLY DRY, PROSPECTS DETERIORATING
-2 TO -3 TOO DRY, YIELD PROSPECTS REDUCED
-3 TO -4 POTENTIAL YIELDS SEVERELY CUT BY DROUGHT
BELOW -4 EXTREMELY DRY, MOST CROPS RUINED
Based on preliminary reports

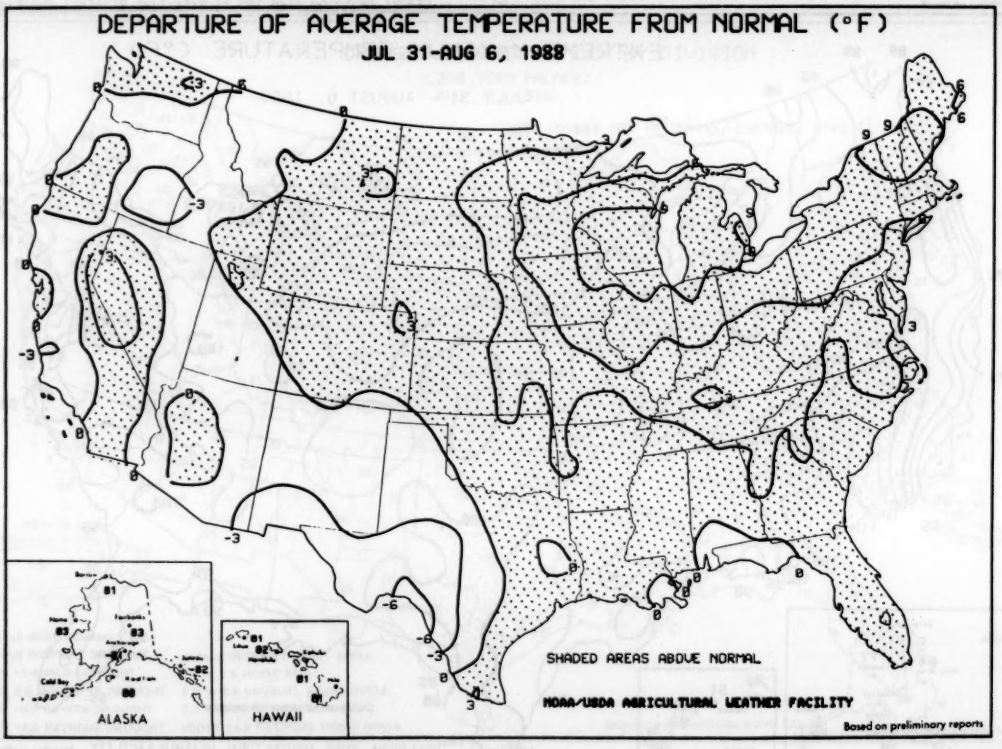

DROUGHT SEVERITY
(LONG TERM, PALMER)
AUGUST 6, 1988
MOIST
MOIST
EXTREME
SEVERE
MODERATE
SEVERE
SEVERE
EXTREME
EXTREME
SEVERE
EXTREME
MOIST
EXTREME
SEVERE
SEVERE
MODERATE
MOIST
DROUGHT SEVERITY INDEX (PALMER): DEPICTS PRO-
LONGED (MONTHS, YEARS) ABNORMAL DRYNESS OR WETNESS;
RESPONDS SLOWLY; CHANGES LITTLE FROM WEEK TO WEEK;
AND REFLECTS LONG TERM MOISTURE RUNOFF, RECHARGE,
AND DEEP PERCOLATION, AS WELL AS EVAPOTRANSPIRATION.
USES...APPLICABLE IN MEASURING DISRUPTIVE EFFECTS OF PROLONGED
DRYNESS OR WETNESS ON WATER SENSETIVE ECONOMIES; DESIGNATING DIS-
ASTER AREAS OF DROUGHT OR WETNESS; AND REFLECTING THE GENERAL, LONG
TERM STATUS OF WATER SUPPLIES IN AQUIFERS, RESERVOIRS, AND STREAMS.
LIMITATIONS...IS NOT GENERALLY INDICATIVE OF SHORT TERM (FEW WEEKS)
STATUS OF DROUGHT OR WETNESS SUCH AS FREQUENTLY AFFECTS CROPS AND
FIELD OPERATIONS (THIS IS INDICATED BY THE CROP MOISTURE INDEX).
NOAA/USDA JOINT AGRICULTURAL WEATHER FACILITY
Based on preliminary reports


DROUGHT SEVERITY INDEX BY DIVISION
(LONG TERM PALMER)
AUG 6, 1988
(INDEX VALUES ARE IN TENTHS, EXAMPLE: 37=3.7)
PUERTO RICO
MARYLAND
.4 to -.4 NEAR NORMAL
-.5 to -.9 INCIPIENT DROUGHT
-1.0 to -1.9 MILD DROUGHT
-2.0 to 2.9 MODERATE DROUGHT
-3.0 to -3.9 SEVERE DROUGHT
BELOW -4.0 EXTREME DROUGHT
.5 to .9 INCIPIENT MOIST SPELL
1.0 to 1.9 MOIST SPELL
2.0 to 2.9 UNUSUAL MOIST SPELL
3.0 to 3.9 VERY MOIST SPELL
ABOVE +4.0 EXTREME MOIST SPELL
NOAA/USDA JOINT AGRICULTURAL WEATHER FACILITY
Based on preliminary reports


ADDITIONAL PRECIPITATION NEEDED TO BRING INDEX NEAR ZERO
(LONG TERM PALMER)
AUG 6, 1988
(VALUES ARE IN TENTHS, EXAMPLE: 37=3.7)
PUERTO RICO
MARYLAND
NOAA/USDA JOINT AGRICULTURAL WEATHER FACILITY
Based on preliminary reports


EXTREME MAXIMUM TEMPERATURE (°F)
JULY 31 - AUGUST 6, 1988
ALASKA
HAWAII
SHADED AREAS ABOVE 100 DEGREES
NOAA/USDA JOINT AGRICULTURAL WEATHER FACILITY
Based on preliminary reports


AVERAGE TEMPERATURE (°F)
JUL 31-AUG 6, 1988
ALASKA
HAWAII
NOAA/USDA AGRICULTURAL WEATHER FACILITY
Based on preliminary reports

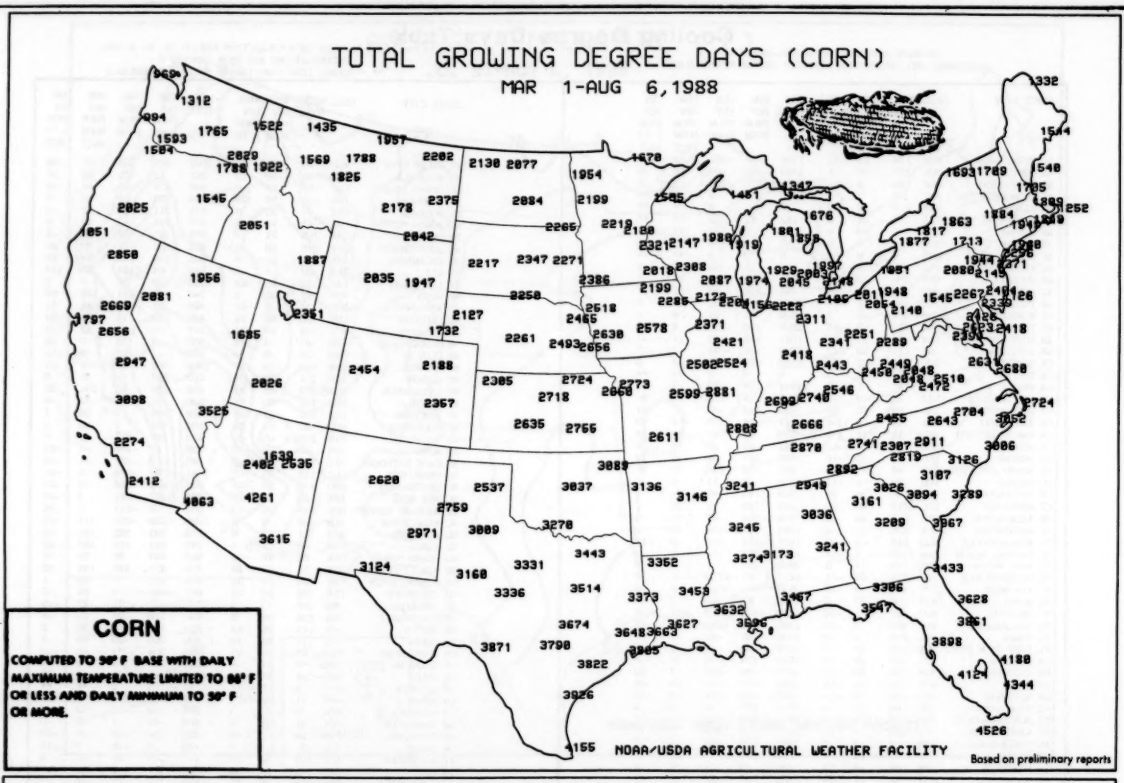

DEPARTURE OF AVERAGE TEMPERATURE FROM NORMAL (°F)
JUL 31-AUG 6, 1988
SHADED AREAS ABOVE NORMAL
ALASKA
HAWAII
NOAA/USDA AGRICULTURAL WEATHER FACILITY
Based on preliminary reports

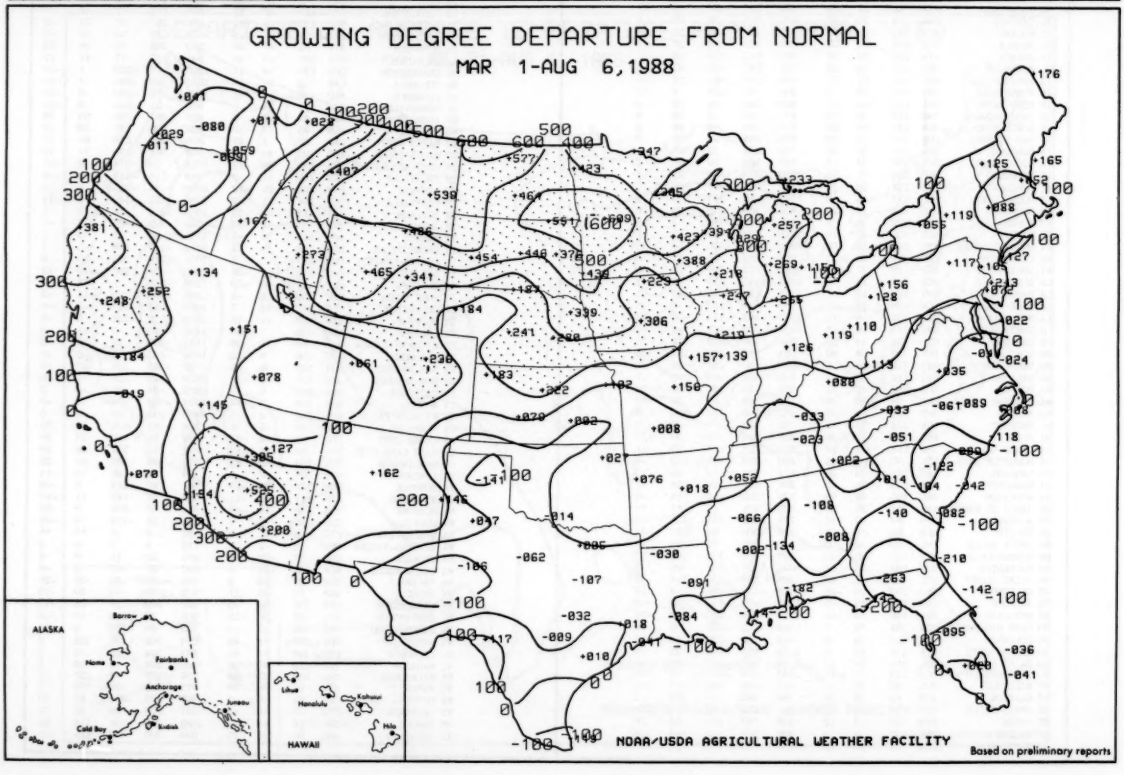
# Cooling Degree Days Table

CLIMATE ANALYSIS CENTER-NMC-NWS-NOAA
ASSESSMENT AND INFORMATION SERVICES CENTER-NESDIS-NOAA

LAST DATE OF DATA COLLECTION PERIOD IS 8- 6-1988
ACCUMULATIONS ARE FROM JANUARY 1
** = NORMAL LESS THAN 100 OR RATIO INCALCULABLE

| STATE CITY | CALL | WEEK TOTAL | WEEK DEV FROM NORM | WEEK DEV FROM L YR | CUM TOTAL | CUM DEV FROM NORM | CUM DEV FROM L YR | CUM DEV FROM NORM PRCT | CUM DEV FROM L YR PRCT |
|---|---|---|---|---|---|---|---|---|---|
| AL BIRMINGHAM | BHM | 119 | 11 | -13 | 1100 | -98 | -203 | -8 | -16 |
| AL MOBILE | MOB | 117 | -2 | -1 | 1463 | -162 | -89 | -10 | -5 |
| AL MONTGOMERY | MGM | 124 | 5 | -12 | 1259 | -170 | -224 | -12 | -15 |
| AK ANCHORAGE | ANC | 0 | 0 | 0 | 0 | 0 | -2 | ** | ** |
| AK BARROW | BRW | 0 | 0 | 0 | 0 | 0 | 0 | ** | ** |
| AK FAIRBANKS | FAI | 0 | -4 | 0 | 122 | 71 | 32 | ** | ** |
| AK JUNEAU | JNU | 0 | 0 | 0 | 0 | 0 | -6 | ** | ** |
| AK KODIAK | ADQ | 0 | 0 | 0 | 0 | 0 | -8 | ** | ** |
| AK NOME | OME | 0 | 0 | 0 | 0 | 0 | -2 | ** | ** |
| AZ FLAGSTAFF | FLG | 6 | -8 | -11 | 118 | 18 | 69 | 16 | 141 |
| AZ PHOENIX | PHX | 200 | 13 | 6 | 2941 | 674 | -21 | 30 | -1 |
| AZ PRESCOTT | PRC | 65 | 13 | -9 | 642 | 216 | 94 | 51 | 17 |
| AZ TUCSON | TUS | 140 | -1 | -10 | 2085 | 371 | 92 | 22 | 5 |
| AZ WINSLOW | INW | 87 | -6 | 7 | 826 | 31 | 33 | 4 | 4 |
| AZ YUMA | YUM | 198 | -4 | -13 | 2604 | 106 | -221 | 4 | -8 |
| AR FORT SMITH | FSM | 149 | 27 | -10 | 1381 | 132 | -48 | 11 | -3 |
| AR LITTLE ROCK | LRI | 141 | 22 | -17 | 1295 | -15 | -264 | -1 | -17 |
| CA BAKERSFIELD | BFL | 121 | -13 | -27 | 1339 | -90 | -3 | -6 | 0 |
| CA EUREKA | EKA | 0 | 0 | 0 | 0 | 0 | -3 | ** | ** |
| CA FRESNO | FAT | 111 | 1 | -35 | 1244 | 156 | -50 | 14 | -4 |
| CA LOS ANGELES | LAX | 33 | -2 | -3 | 296 | -8 | 116 | -3 | 64 |
| CA SACHAMENTO | SAC | 65 | -10 | -48 | 933 | 219 | 165 | 31 | 21 |
| CA SAN DIEGO | SAN | 49 | 0 | -4 | 317 | -44 | 93 | -12 | 42 |
| CA SAN FRANCISCO | SFO | 15 | 11 | 3 | 109 | 81 | 42 | ** | ** |
| CA STOCKTON | SCK | 58 | -33 | -51 | 841 | -22 | 29 | -3 | 4 |
| CO DENVER | DEN | 74 | 13 | -16 | 627 | 161 | 66 | 35 | 12 |
| CO GRAND JUNCTION | GJT | 88 | -7 | 3 | 977 | 156 | 261 | 19 | 36 |
| CO PUEBLO | PUB | 86 | 4 | -17 | 734 | 33 | 11 | 5 | 2 |
| CT BRIDGEPORT | BDR | 106 | 38 | 39 | 615 | 145 | 40 | 31 | 7 |
| CT HARTFORD | BDL | 115 | 59 | 63 | 540 | 122 | 31 | 26 | 6 |
| DE WILMINGTON | ILG | 117 | 40 | 12 | 855 | 202 | -47 | 31 | -5 |
| DC WASHINGTON | DCA | 135 | 37 | 4 | 1066 | 145 | -108 | 16 | -9 |
| FL APALACHICOLA | AQQ | 115 | -4 | -20 | 1407 | -144 | -197 | -9 | -12 |
| FL DAYTONA BEACH | DAB | 113 | 1 | -14 | 1523 | -152 | -51 | -9 | -3 |
| FL FORT MEYER | FMY | 137 | 11 | 5 | 2200 | 52 | 1 | 2 | 0 |
| FL JACKSONVILLE | JAX | 128 | 16 | -11 | 1423 | -81 | -110 | -5 | -7 |
| FL KEY WEST | EYW | 142 | 2 | -6 | 2536 | -243 | -121 | -9 | -5 |
| FL MIAMI | MIA | 145 | 19 | 7 | 2429 | 53 | -49 | 2 | -2 |
| FL ORLANDO | MCO | 127 | 1 | -14 | 1789 | -219 | -133 | -11 | -7 |
| FL TALLAHASSEE | TLH | 116 | 0 | -10 | 1280 | -240 | -222 | -16 | -15 |
| FL TAMPA | TPA | 125 | 0 | -8 | 1825 | -145 | -86 | -7 | -5 |
| FL WEST PALM BEACH | PBI | 135 | 15 | 6 | 2178 | 30 | -16 | 1 | -1 |
| GA ATLANTA | ATL | 127 | 29 | 0 | 1233 | 170 | -105 | 16 | -8 |
| GA AUGUSTA | AGS | 132 | 20 | -9 | 1145 | -89 | -288 | -7 | -20 |
| GA MACON | MCN | 131 | 12 | -13 | 1268 | -143 | -238 | -10 | -16 |
| GA SAVANNAH | SAV | 135 | 19 | -11 | 1389 | -38 | -211 | -3 | -13 |
| HI HILO-HAWAII | ITO | 89 | 15 | 6 | 1914 | 159 | 70 | 9 | 4 |
| HI HONOLULU-OAHU | HNL | 126 | 14 | 4 | 2829 | 389 | 293 | 15 | 12 |
| HI KAHULUI-MAUI | OGG | 103 | 5 | 11 | 2271 | 139 | 333 | 7 | 17 |
| HI LIHUE-KAUAI | LIH | 104 | 6 | 0 | 2396 | 329 | 482 | 16 | 25 |
| ID BOISE | BOI | 47 | -21 | 4 | 628 | 139 | 73 | 28 | 13 |
| ID LEWISTON | LWS | 64 | -4 | 12 | 520 | 49 | -23 | 10 | -4 |
| ID POCATELLO | PIH | 40 | -7 | -4 | 488 | 185 | 229 | 61 | 88 |
| IL CHICAGO | ORD | 130 | 73 | 30 | 800 | 305 | -39 | 62 | -5 |
| IL MOLINE | MLI | 131 | 61 | 11 | 859 | 221 | -187 | 35 | -18 |
| IL PEORIA | PIA | 134 | 64 | 22 | 895 | 233 | -115 | 35 | -11 |
| IL QUINCY | UIN | 140 | 60 | 26 | 883 | 115 | -179 | 15 | -17 |
| IL ROCKFORD | RFD | 120 | 64 | 26 | 751 | 247 | -68 | 49 | -8 |
| IL SPRINGFIELD | SPI | 128 | 51 | 17 | 915 | 114 | -181 | 14 | -17 |
| IN EVANSVILLE | EVV | 120 | 29 | 1 | 998 | 61 | -133 | 7 | -12 |
| IN FORT WAYNE | FWA | 110 | 54 | 23 | 829 | 294 | 68 | 55 | 9 |
| IN INDIANAPOLIS | IND | 116 | 46 | 23 | 871 | 196 | 18 | 29 | 2 |
| IN SOUTH BEND | SBN | 137 | 86 | 52 | 814 | 329 | -4 | 68 | 0 |
| IA DES MOINES | DSM | 131 | 54 | 26 | 976 | 264 | -4 | 37 | 0 |
| IA DUBUQUE | DBQ | 116 | 67 | 28 | 723 | 294 | 32 | 69 | 5 |
| IA SIOUX CITY | SUX | 107 | 34 | 13 | 940 | 282 | 20 | 43 | 2 |
| IA WATERLOO | ALO | 124 | 71 | 33 | 806 | 323 | -34 | 67 | -4 |
| KS CONCORDIA | CNK | 131 | 29 | -10 | 1127 | 233 | -17 | 26 | -1 |
| KS DODGE CITY | DDC | 117 | 12 | -8 | 1047 | 69 | 167 | 7 | 19 |
| KS GOODLAND | GLD | 89 | 12 | -20 | 807 | 165 | 73 | 26 | 10 |
| KS TOPEKA | TOP | 123 | 25 | 5 | 938 | 13 | -183 | 1 | -16 |
| KS WICHITA | ICT | 136 | 17 | -10 | 1168 | 53 | -10 | 5 | -1 |
| KY BOWLING GREEN | BWG | 107 | 16 | -5 | 883 | -61 | -150 | -6 | -15 |
| KY LEXINGTON | LEX | 116 | 39 | 2 | 933 | 163 | -85 | 21 | -8 |
| KY LOUISVILLE | SDF | 128 | 37 | 10 | 1040 | 152 | -102 | 17 | -9 |
| LA ALEXANDRIA | AEX | 138 | 12 | 5 | 1454 | -134 | -16 | -8 | -1 |
| LA BATON ROUGE | BTR | 138 | 19 | 7 | 1598 | -26 | -43 | -2 | -3 |
| LA LAKE CHARLES | LCH | 130 | 11 | -17 | 1539 | -100 | -132 | -6 | -8 |
| LA NEW ORLEANS | MSY | 115 | -4 | -14 | 1503 | -169 | -171 | -10 | -10 |
| LA SHREVEPORT | SHV | 141 | 15 | -15 | 1455 | -78 | -111 | -5 | -7 |
| ME CARIBOU | CAR | 61 | 47 | 56 | 248 | 130 | 109 | 110 | 78 |
| ME PORTLAND | PWM | 90 | 58 | 69 | 384 | 212 | 173 | 123 | 82 |
| MD BALTIMORE | BWI | 118 | 34 | 0 | 927 | 190 | -56 | 26 | -6 |
| MD SALISBURY | SBY | 112 | 28 | 7 | 849 | 159 | -63 | 23 | -7 |
| MA BOSTON | BOS | 109 | 47 | 61 | 591 | 132 | 197 | 29 | 50 |
| MA CHATHAM | CHH | 58 | 30 | 36 | 199 | 59 | 84 | 42 | 73 |
| MI ALPENA | APN | 88 | 67 | 49 | 422 | 296 | 34 | 235 | 9 |
| MI DETROIT | DTW | 124 | 75 | 43 | 753 | 335 | 1 | 80 | 0 |
| MI FLINT | FNT | 107 | 72 | 39 | 632 | 315 | -78 | 99 | -11 |
| MI GRAND RAPIDS | GRR | 115 | 71 | 36 | 623 | 222 | -74 | 55 | -11 |
| MI HOUGHTON LAKE | HTL | 91 | 63 | 45 | 490 | 280 | -20 | 133 | -4 |
| MI LANSING | LAN | 121 | 79 | 46 | 622 | 246 | -72 | 65 | -10 |
| MI MARQUETTE | MQT | 40 | 26 | 13 | 286 | 166 | 28 | 138 | 11 |
| MI MUSKEGON | MKG | 105 | 64 | 38 | 520 | 202 | -53 | 64 | -9 |
| MI SAULT ST MARIE | SSM | 44 | 26 | 29 | 200 | 101 | 10 | ** | ** |
| MN ALEXANDRIA | AXN | 87 | 45 | 12 | 775 | 432 | 155 | 126 | 25 |
| MN DULUTH | DLH | 35 | 15 | 2 | 316 | 206 | 84 | 187 | 36 |
| MN INT'L FALLS | INL | 29 | 8 | 0 | 341 | 165 | 72 | 94 | 27 |
| MN MINNEAPOLIS | MSP | 116 | 60 | 35 | 897 | 409 | 130 | 84 | 17 |
| MN ROCHESTER | RST | 102 | 63 | 36 | 601 | 237 | 12 | 65 | 2 |
| MN SAINT CLOUD | STC | 82 | 47 | 20 | 689 | 381 | 139 | 124 | 25 |
| MO GREENWOOD | GRO | 133 | 14 | -18 | 1313 | -130 | -255 | -9 | -16 |
| MS JACKSON | JAN | 134 | 15 | -5 | 1396 | -62 | -130 | -4 | -9 |
| MS MERIDIAN | MEI | 125 | 13 | -11 | 1200 | -170 | -231 | -12 | -16 |
| MO CAPE GIRARDEAU | CGI | 134 | 31 | 5 | 1058 | -2 | -237 | 0 | -18 |
| MO COLUMBIA | COU | 130 | 39 | 6 | 942 | 98 | -129 | 12 | -12 |
| MO KANSAS CITY | MCI | 137 | 40 | 2 | 1133 | 229 | -63 | 25 | -5 |
| MO SAINT LOUIS | STL | 154 | 57 | 21 | 1199 | 223 | -107 | 23 | -8 |
| MO SPRINGFIELD | SGF | 113 | 17 | -17 | 845 | -54 | -247 | -6 | -23 |
| MT BILLINGS | BIL | 68 | 12 | 13 | 807 | 435 | 356 | 117 | 79 |
| MT GLASGOW | GGW | 66 | 20 | 32 | 786 | 480 | 377 | 157 | 92 |
| MT GREAT FALLS | GTF | 26 | -16 | 3 | 413 | 171 | 145 | 71 | 54 |
| MT HAVRE | HVR | 36 | -6 | 12 | 466 | 189 | 201 | 68 | 76 |
| MT HELENA | HLN | 37 | 5 | 13 | 420 | 224 | 213 | 114 | 103 |
| MT KALISPELL | FCA | 11 | -10 | 10 | 136 | 38 | 5 | ** | ** |
| MT MILES CITY | MLS | 96 | 23 | 43 | 1007 | 481 | 406 | 91 | 68 |
| MT MISSOULA | MSO | 18 | -10 | 12 | 221 | 74 | 59 | 50 | 36 |
| NE GRAND ISLAND | GRI | 98 | 14 | -8 | 888 | 170 | -50 | 24 | -5 |
| NE LINCOLN | LNK | 124 | 34 | 16 | 1034 | 250 | -19 | 32 | -2 |
| NE NORFOLK | OFK | 97 | 20 | 0 | 871 | 211 | -28 | 32 | -3 |
| NE NORTH PLATTE | LBF | 84 | 14 | -2 | 701 | 156 | 40 | 29 | 6 |
| NE OMAHA | ONA | 109 | 21 | 10 | 978 | 155 | -27 | 19 | -3 |
| NE SCOTTSBLUFF | BFF | 75 | 10 | -8 | 666 | 154 | 111 | 30 | 20 |
| NE VALENTINE | VTN | 91 | 21 | -9 | 845 | 312 | 133 | 59 | 19 |
| NV ELY | ELY | 20 | -1 | -8 | 210 | 84 | 124 | 67 | 144 |
| NV LAS VEGAS | LAS | 170 | -5 | -22 | 2023 | 130 | 39 | 7 | 2 |
| NV RENO | RNO | 67 | 32 | 2 | 545 | 300 | 181 | 122 | 50 |
| NV WINNEMUCCA | WMC | 45 | -2 | -23 | 526 | 161 | 153 | 44 | 41 |
| NH CONCORD | CON | 100 | 65 | 74 | 445 | 185 | 114 | 71 | 34 |
| NJ ATLANTIC CITY | ACY | 104 | 37 | 24 | 707 | 175 | -22 | 33 | -3 |
| NM ALBUQUERQUE | ABQ | 87 | -4 | -14 | 863 | 2 | 91 | 0 | 12 |
| NM CLOVIS | CVS | 75 | -9 | -28 | 805 | -1 | -121 | 0 | -13 |
| NM ROSWELL | ROW | 102 | -10 | -27 | 1058 | -204 | -11 | -16 | -1 |
| NY ALBANY | ALB | 101 | 59 | 67 | 553 | 197 | 43 | 55 | 8 |
| NY BINGHAMTON | BGM | 79 | 51 | 53 | 466 | 238 | 85 | 104 | 22 |
| NY BUFFALO | BUF | 101 | 60 | 64 | 520 | 191 | -46 | 58 | -8 |
| NY NEW YORK | LGA | 125 | 41 | 39 | 836 | 164 | 7 | 24 | 1 |
| NY ROCHESTER | RUC | 95 | 53 | 69 | 504 | 142 | 7 | 39 | 1 |
| NY SYRACUSE | SYR | 102 | 60 | 69 | 532 | 187 | 1 | 54 | 0 |
| NC ASHEVILLE | AVL | 82 | 20 | -12 | 536 | -7 | -158 | -1 | -23 |
| NC CAPE HATTERAS | HAT | 110 | 12 | -5 | 885 | -13 | -165 | -1 | -16 |
| NC CHARLOTTE | CLT | 118 | 20 | -17 | 1041 | 36 | -274 | 4 | -21 |
| NC GREENSBORO | GSO | 110 | 22 | -13 | 836 | -39 | -258 | -4 | -24 |
| NC NEW BERN | EWN | 127 | 22 | -11 | 1140 | 37 | -211 | 3 | -16 |
| NC RALEIGH DURHAM | RDU | 116 | 25 | -10 | 901 | -6 | -247 | -1 | -22 |
| NC WILMINGTON | ILM | 120 | 8 | -9 | 1065 | -129 | -260 | -11 | -20 |
| ND BISMARCK | BIS | 61 | 12 | 6 | 718 | 393 | 255 | 121 | 55 |
| ND FARGO | FAR | 79 | 37 | 3 | 787 | 443 | 176 | 129 | 29 |
| ND GRAND FORKS | GFK | 51 | 16 | -13 | 557 | 246 | 98 | 79 | 21 |
| ND WILLISTON | ISN | 55 | 13 | 19 | 755 | 451 | 348 | 148 | 85 |
| OH AKRON-CANTON | CAK | 100 | 51 | 24 | 644 | 231 | 5 | 56 | 1 |
| OH CLEVELAND | CLE | 105 | 56 | 34 | 667 | 261 | -14 | 64 | -2 |
| OH COLUMBUS | CMH | 106 | 43 | 5 | 730 | 157 | -128 | 27 | -15 |
| OH CINCINNATI | CVG | 109 | 35 | 6 | 841 | 156 | -76 | 23 | -8 |
| OH DAYTON | DAY | 113 | 46 | 19 | 823 | 189 | 19 | 30 | 2 |
| OH TOLEDO | TOL | 111 | 64 | 19 | 690 | 266 | -20 | 63 | -3 |
| OH YOUNGSTOWN | YNG | 87 | 52 | 27 | 529 | 204 | -73 | 63 | -12 |
| OK OKLAHOMA CITY | OKC | 137 | 11 | -8 | 1269 | 55 | -54 | 5 | -4 |
| OK TULSA | TUL | 141 | 10 | -18 | 1362 | 62 | -143 | 5 | -10 |
| OR ASTORIA | AST | 2 | -2 | 1 | 12 | -3 | 2 | ** | ** |
| OR BURNS | BNO | 11 | -24 | -24 | 217 | -22 | 100 | -9 | 85 |
| OR MEDFORD | MFR | 74 | 18 | 3 | 535 | 134 | -14 | 33 | -3 |
| OR PENDLETON | PDT | 45 | -18 | 8 | 402 | -87 | 1 | -14 | 0 |
| OR PORTLAND | PDX | 28 | -5 | -4 | 227 | 30 | -54 | 15 | -19 |
| OR SALEM | SLE | 21 | 0 | 5 | 148 | 10 | -28 | 7 | -16 |
| PA ALLENTOWN | ABE | 107 | 44 | 35 | 713 | 207 | 25 | 41 | 4 |
| PA ERIE | ERI | 95 | 60 | 45 | 536 | 281 | -63 | 110 | -11 |
| PA HARRISBURG | CXY | 113 | 36 | 15 | 804 | 137 | -42 | 21 | -5 |
| PA PHILADELPHIA | PHL | 130 | 46 | 19 | 931 | 231 | -31 | 33 | -3 |
| PA PITTSBURGH | PIT | 100 | 51 | 13 | 673 | 246 | -53 | 58 | -7 |
| PA SCRANTON | AVP | 95 | 47 | 46 | 580 | 189 | 62 | 48 | 12 |
| RI PROVIDENCE | PVD | 101 | 45 | 49 | 541 | 157 | 77 | 41 | 17 |
| SC CHARLESTON | CHS | 130 | 18 | -17 | 1305 | 17 | -220 | 1 | -14 |
| SC COLUMBIA | CAE | 133 | 21 | -10 | 1222 | -89 | -280 | -7 | -19 |
| SC FLORENCE | FLO | 128 | 16 | -7 | 1209 | -72 | -240 | -6 | -17 |
| SC GREENVILLE | GSP | 121 | 24 | 3 | 960 | -21 | -240 | -2 | -20 |
| SD ABERDEEN | ABR | 82 | 26 | -5 | 825 | 401 | 186 | 95 | 29 |
| SD HURON | HON | 85 | 17 | -10 | 831 | 308 | 91 | 59 | 12 |
| SD RAPID CITY | RAP | 67 | 5 | -23 | 800 | 368 | 218 | 85 | 37 |
| SD SIOUX FALLS | FSD | 109 | 44 | 22 | 921 | 381 | 131 | 71 | 17 |
| TN CHATTANOOGA | CHA | 124 | 26 | -13 | 1027 | 16 | -274 | 2 | -21 |
| TN KNOXVILLE | TYS | 115 | 24 | -7 | 918 | -19 | -178 | -2 | -16 |
| TN MEMPHIS | MEM | 143 | 24 | -13 | 1389 | 47 | -225 | 4 | -14 |
| TN NASHVILLE | BNA | 134 | 31 | -2 | 1150 | 83 | -149 | 8 | -11 |
| TX ABILENE | ABI | 117 | -21 | -33 | 1369 | -202 | -18 | -13 | -1 |
| TX AMARILLO | AMA | 85 | -12 | -22 | 746 | -205 | -60 | -22 | -7 |
| TX AUSTIN | AUS | 144 | 4 | -1 | 1741 | -59 | 23 | -3 | 1 |
| TX BROWNSVILLE | BRO | 148 | 9 | 2 | 2184 | -118 | 108 | -5 | 5 |
| TX CORPUS CHRISTI | CRP | 143 | -1 | 7 | 1951 | -210 | 103 | -10 | 6 |
| TX DEL RIO | DRT | 106 | -41 | -35 | 1883 | -207 | 298 | -10 | 19 |
| TX EL PASO | ELP | 89 | -30 | -39 | 1204 | -210 | 1 | -15 | 0 |
| TX FORT WORTH | DFW | 159 | 5 | -5 | 1586 | -203 | -35 | -11 | -2 |
| TX GALVESTON | GLS | 147 | 14 | 3 | 1686 | -45 | -113 | -3 | -6 |
| TX HOUSTON | IAH | 139 | 13 | -15 | 1688 | 3 | -104 | 0 | -6 |
| TX LUBBOCK | LBB | 105 | 7 | -20 | 1122 | -10 | 3 | -1 | 0 |
| TX MIDLAND ODESSA | MAF | 89 | -30 | -36 | 1148 | -253 | 18 | -18 | 2 |
| TX BEAUMONT | BPT | 136 | 9 | -12 | 1624 | -103 | -101 | -6 | -6 |
| TX SAN ANGELO | SJT | 105 | -34 | -22 | 1332 | -343 | 126 | -20 | 10 |
| TX SAN ANTONIO | SAT | 135 | -5 | -14 | 1839 | -22 | 132 | -1 | 8 |
| TX VICTORIA | VCT | 144 | 4 | 2 | 1855 | -88 | 35 | -5 | 2 |
| TX WACO | ACT | 159 | 5 | -17 | 1674 | -128 | -34 | -7 | 2 |
| TX WICHITA FALLS | SPS | 156 | 9 | -9 | 1489 | -101 | 40 | -6 | 3 |
| UT BLANDING | 4BL | 49 | -8 | -9 | 554 | 111 | 93 | 25 | 20 |
| UT CEDAR CITY | CDC | 54 | -9 | -32 | 539 | 81 | 110 | 18 | 26 |
| UT SALT LAKE CITY | SLC | 93 | 4 | -15 | 971 | 313 | 221 | 48 | 29 |
| VT BURLINGTON | BTV | 105 | 69 | 85 | 479 | 195 | 95 | 69 | 25 |
| VA LYNCHBURG | LYH | 104 | 27 | 2 | 789 | 89 | -129 | 13 | -14 |
| VA NORFOLK | ORF | 120 | 22 | -10 | 987 | 80 | -212 | 9 | -18 |
| VA RICHMOND | RIC | 117 | 26 | -11 | 954 | 97 | -142 | 11 | -13 |
| VA ROANOKE | ROA | 96 | 19 | -18 | 758 | 44 | -232 | 6 | -23 |
| WA COLVILLE | 63S | 23 | -12 | 4 | 226 | 28 | -104 | 14 | -32 |
| WA QUILLAYUTE | UIL | 3 | -1 | 3 | 22 | 3 | 18 | ** | ** |
| WA SEATTLE-TACOMA | SEA | 19 | -2 | 4 | 116 | 4 | 3 | 4 | 3 |
| WA SPOKANE | GEG | 30 | -12 | 12 | 275 | 20 | 11 | 8 | 4 |
| WA WALLA WALLA | ALW | 66 | -11 | 4 | 587 | 27 | -37 | 5 | -6 |
| WA YAKIMA | YKM | 26 | -16 | 0 | 282 | -65 | -65 | -20 | -20 |
| WV BECKLEY | BKW | 70 | 35 | -11 | 470 | 156 | -80 | 50 | -15 |
| WV CHARLESTON | CRW | 106 | 36 | -3 | 820 | 162 | -124 | 25 | -13 |
| WV HUNTINGTON | HTS | 103 | 30 | -15 | 809 | 76 | -124 | 10 | -13 |
| WV PARKERSBURG | PKB | 103 | 33 | -3 | 723 | 60 | -157 | 9 | -18 |
| WI GREEN BAY | GRB | 109 | 74 | 46 | 596 | 305 | 36 | 105 | 6 |
| WI LACROSSE | LSE | 137 | 81 | 41 | 883 | 364 | 29 | 73 | 3 |
| WI MADISON | MSN | 119 | 77 | 36 | 642 | 294 | -11 | 84 | -2 |
| WI MILWAUKEE | MKE | 133 | 91 | 55 | 728 | 407 | -7 | 127 | -1 |
| WI WAUSAU | AUW | 99 | 66 | 36 | 579 | 298 | 19 | 106 | 3 |
| WY CASPER | CPR | 61 | 15 | 1 | 582 | 270 | 230 | 87 | 70 |
| WY CHEYENNE | CYS | 43 | 15 | -7 | 327 | 106 | 88 | 48 | 37 |
| WY LANDER | LND | 58 | 16 | -5 | 633 | 338 | 291 | 115 | 85 |
| WY SHERIDAN | SHR | 63 | 21 | 22 | 679 | 398 | 409 | 142 | 151 |


TOTAL GROWING DEGREE DAYS (CORN)
MAR 1-AUG 6,1988
CORN
COMPUTED TO 50° F BASE WITH DAILY MAXIMUM TEMPERATURE LIMITED TO 86° F OR LESS AND DAILY MINIMUM TO 50° F OR MORE.
NOAA/USDA AGRICULTURAL WEATHER FACILITY
Based on preliminary reports


GROWING DEGREE DEPARTURE FROM NORMAL
MAR 1-AUG 6,1988
ALASKA
HAWAII
NOAA/USDA AGRICULTURAL WEATHER FACILITY
Based on preliminary reports

# National Weather Data for Selected Cities

## Weather Data for the Week Ending August 6, 1988

| STATES AND STATIONS | TEMPERATURE °F | | | | | | PRECIPITATION | | | | | | | RELATIVE HUMIDITY, PERCENT | | NUMBER OF DAYS | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | | | | | | | | TEMPERATURE °F | | PRECIPITATION | |
| | AVERAGE MAXIMUM | AVERAGE MINIMUM | EXTREME HIGH | EXTREME LOW | AVERAGE | DEPARTURE FROM NORMAL | WEEKLY TOTAL, IN. | DEPARTURE FROM NORMAL | GREATEST IN 24-HOUR, IN. | TOTAL, IN., SINCE June 1 | PCT. NORMAL SINCE June 1 | TOTAL, IN., SINCE JAN 1 | PCT. NORMAL SINCE JAN 1 | AVERAGE MAXIMUM | AVERAGE MINIMUM | 90 AND ABOVE | 32 AND BELOW | .01 INCH OR MORE | .50 INCH OR MORE |
| AL BIRMINGHAM | 94 | 70 | 96 | 68 | 82 | 1 | T | -.9 | T | 3.8 | 39 | 19.4 | 54 | 98 | 46 | 7 | 0 | 0 | 0 |
| MOBILE | 89 | 74 | 95 | 70 | 82 | -1 | 1.1 | -.5 | .6 | 9.4 | 66 | 32.9 | 80 | 96 | 60 | 4 | 0 | 4 | 1 |
| MONTGOMERY | 94 | 71 | 97 | 70 | 82 | 1 | .5 | -.3 | .3 | 12.8 | 145 | 38.5 | 121 | 99 | 52 | 6 | 0 | 3 | 0 |
| AK ANCHORAGE | 63 | 50 | 70 | 47 | 57 | -1 | .5 | 0 | .3 | 1.9 | 55 | 4.2 | 61 | 93 | 65 | 0 | 0 | 4 | 0 |
| BARROW | 47 | 33 | 61 | 30 | 40 | 1 | .4 | .2 | .2 | 1.1 | 77 | 1.3 | 57 | 100 | 85 | 0 | 3 | 3 | 0 |
| FAIRBANKS | 71 | 53 | 77 | 48 | 62 | 3 | .7 | .2 | .4 | 4.0 | 113 | 6.2 | 109 | 93 | 45 | 0 | 0 | 4 | 0 |
| JUNEAU | 60 | 48 | 65 | 44 | 54 | -2 | .7 | -.4 | .4 | 7.2 | 90 | 26.6 | 106 | 99 | 73 | 0 | 0 | 4 | 0 |
| KODIAK | 62 | 48 | 67 | 44 | 55 | 0 | .8 | -.2 | .3 | 6.2 | 74 | 41.0 | 127 | 98 | 72 | 0 | 0 | 6 | 0 |
| NOME | 61 | 47 | 64 | 38 | 54 | 3 | .1 | -.6 | 0 | 1.7 | 44 | 5.7 | 81 | 92 | 66 | 0 | 0 | 2 | 0 |
| AZ PHOENIX | 102 | 84 | 107 | 82 | 93 | 2 | .1 | -.1 | .1 | 1.0 | 90 | 3.4 | 95 | 60 | 25 | 7 | 0 | 2 | 0 |
| PRESCOTT | 86 | 62 | 90 | 59 | 74 | 2 | .9 | .1 | .5 | 4.8 | 106 | 9.1 | 87 | 82 | 39 | 1 | 0 | 3 | 0 |
| TUCSON | 95 | 74 | 100 | 72 | 85 | 0 | .4 | -.2 | .3 | 2.2 | 67 | 4.6 | 80 | 81 | 32 | 7 | 0 | 3 | 0 |
| YUMA | 105 | 81 | 108 | 79 | 93 | -1 | 0 | -.1 | 0 | .1 | 45 | 1.1 | 99 | 67 | 27 | 7 | 0 | 0 | 0 |
| AR PORT SMITH | 100 | 72 | 104 | 70 | 86 | 4 | T | -.7 | T | 4.1 | 56 | 19.6 | 80 | 95 | 38 | 7 | 0 | 0 | 0 |
| LITTLE ROCK | 95 | 75 | 95 | 73 | 85 | 3 | 1.4 | .7 | 1.4 | 11.4 | 147 | 26.7 | 86 | 83 | 54 | 7 | 0 | 2 | 1 |
| CA BAKERSFIELD | 95 | 68 | 99 | 63 | 82 | -2 | 0 | 0 | 0 | T | 33 | 3.0 | 79 | 74 | 28 | 6 | 0 | 0 | 0 |
| EUREKA | 62 | 52 | 65 | 49 | 57 | 0 | T | -.1 | T | 2.3 | 342 | 15.9 | 71 | 94 | 77 | 0 | 0 | 0 | 0 |
| FRESNO | 94 | 67 | 98 | 62 | 81 | 0 | 0 | 0 | 0 | T | 67 | 5.5 | 79 | 88 | 26 | 6 | 0 | 0 | 0 |
| LOS ANGELES | 74 | 65 | 76 | 63 | 69 | -1 | 0 | 0 | 0 | T | 0 | 4.6 | 56 | 89 | 66 | 0 | 0 | 0 | 0 |
| REDDING | 96 | 66 | 101 | 59 | 81 | -1 | T | -.1 | T | 1.7 | 166 | 16.9 | 68 | 64 | 20 | 6 | 0 | 0 | 0 |
| SACRAMENTO | 89 | 59 | 94 | 56 | 74 | -1 | 0 | 0 | 0 | .2 | 154 | 6.9 | 65 | 83 | 31 | 4 | 0 | 0 | 0 |
| SAN DIEGO | 76 | 68 | 76 | 67 | 72 | 1 | 0 | 0 | 0 | T | 0 | 6.7 | 104 | 84 | 64 | 0 | 0 | 0 | 0 |
| SAN FRANCISCO | 74 | 60 | 77 | 58 | 67 | 4 | 0 | 0 | 0 | .6 | 545 | 7.3 | 59 | 85 | 53 | 0 | 0 | 0 | 0 |
| CO DENVER | 88 | 62 | 94 | 60 | 75 | 2 | .9 | .5 | .7 | 4.4 | 116 | 11.6 | 111 | 81 | 31 | 4 | 0 | 3 | 1 |
| GRAND JUNCTION | 91 | 64 | 94 | 59 | 77 | -1 | .2 | 0 | .1 | .6 | 58 | 4.7 | 107 | 69 | 21 | 5 | 0 | 3 | 0 |
| PUEBLO | 93 | 61 | 98 | 57 | 77 | 1 | .6 | .2 | .6 | 4.5 | 132 | 8.8 | 125 | 85 | 28 | 5 | 0 | 2 | 1 |
| CT BRIDGEPORT | 87 | 73 | 89 | 70 | 80 | 6 | T | -.8 | T | 9.3 | 132 | 22.3 | 91 | 91 | 61 | 0 | 0 | 1 | 0 |
| HARTFORD | 91 | 71 | 94 | 66 | 81 | 8 | T | -.8 | T | 9.1 | 127 | 24.3 | 96 | 96 | 48 | 6 | 0 | 1 | 0 |
| DC WASHINGTON | 92 | 76 | 96 | 74 | 84 | 5 | .1 | -1.0 | .1 | 4.7 | 58 | 19.2 | 82 | 95 | 49 | 7 | 0 | 1 | 0 |
| FL APALACHICOLA | 88 | 74 | 91 | 72 | 81 | -1 | 3.5 | 1.9 | 2.7 | 15.0 | 112 | 36.2 | 117 | 95 | 69 | 1 | 0 | 4 | 2 |
| DAYTONA BEACH | 90 | 71 | 93 | 69 | 81 | 0 | .2 | -1.2 | .1 | 5.5 | 42 | 20.6 | 75 | 97 | 58 | 6 | 0 | 2 | 0 |
| JACKSONVILLE | 94 | 72 | 97 | 71 | 83 | 1 | .1 | -1.6 | .1 | 8.2 | 60 | 28.0 | 90 | 93 | 50 | 7 | 0 | 1 | 0 |
| KEY WEST | 89 | 81 | 91 | 76 | 85 | 0 | .6 | -.3 | .4 | 9.7 | 104 | 25.4 | 132 | 83 | 66 | 3 | 0 | 2 | 0 |
| MIAMI | 91 | 80 | 93 | 75 | 85 | 3 | .3 | -1.1 | .2 | 21.4 | 132 | 31.4 | 98 | 84 | 57 | 7 | 0 | 2 | 0 |
| ORLANDO | 92 | 74 | 94 | 73 | 83 | 0 | 1.4 | -.2 | 1.0 | 15.0 | 91 | 30.4 | 98 | 98 | 52 | 7 | 0 | 4 | 1 |
| TALLAHASSEE | 93 | 69 | 97 | 68 | 81 | 0 | 2.2 | .4 | 1.1 | 10.2 | 61 | 32.5 | 78 | 97 | 51 | 6 | 0 | 4 | 2 |
| TAMPA | 92 | 74 | 94 | 72 | 83 | 0 | .8 | -1.0 | .5 | 9.4 | 66 | 20.8 | 74 | 95 | 55 | 6 | 0 | 2 | 1 |
| WEST PALM BEACH | 90 | 78 | 91 | 76 | 84 | 1 | .2 | -.9 | .2 | 20.2 | 136 | 42.7 | 132 | 88 | 59 | 5 | 0 | 2 | 0 |
| GA ATLANTA | 93 | 73 | 96 | 72 | 83 | 4 | 2.2 | 1.3 | 1.7 | 7.4 | 83 | 25.7 | 79 | 92 | 46 | 6 | 0 | 4 | 1 |
| AUGUSTA | 96 | 71 | 100 | 69 | 84 | 3 | .5 | -.4 | .3 | 7.2 | 79 | 24.6 | 85 | 97 | 43 | 7 | 0 | 3 | 0 |
| MACON | 95 | 72 | 97 | 70 | 83 | 2 | 1.8 | .9 | 1.4 | 6.1 | 68 | 24.8 | 82 | 98 | 46 | 7 | 0 | 3 | 1 |
| SAVANNAH | 94 | 74 | 99 | 72 | 84 | 3 | .8 | -.8 | .8 | 5.3 | 36 | 23.5 | 72 | 93 | 50 | 6 | 0 | 2 | 1 |
| HI HILO | 84 | 71 | 90 | 69 | 77 | 1 | 2.1 | -.3 | 1.2 | 12.7 | 75 | 66.7 | 88 | 92 | 65 | 1 | 0 | 5 | 2 |
| HONOLULU | 90 | 75 | 91 | 72 | 83 | 2 | .2 | 0 | .2 | .3 | 28 | 7.1 | 52 | 78 | 45 | 6 | 0 | 1 | 0 |
| KAHULUI | 86 | 73 | 89 | 73 | 80 | 1 | .2 | .1 | .2 | .4 | 67 | 12.6 | 106 | 88 | 58 | 0 | 0 | 1 | 0 |
| LIHUE | 85 | 74 | 86 | 73 | 80 | 1 | .9 | .5 | .7 | 3.4 | 84 | 22.9 | 93 | 91 | 66 | 0 | 0 | 3 | 1 |
| ID BOISE | 88 | 54 | 98 | 43 | 71 | -3 | .1 | 0 | .1 | .6 | 49 | 6.9 | 95 | 56 | 17 | 3 | 0 | 1 | 0 |
| LEWISTON | 89 | 59 | 97 | 53 | 74 | 0 | 0 | -.2 | 0 | 2.6 | 127 | 6.8 | 85 | 53 | 16 | 4 | 0 | 0 | 0 |
| POCATELLO | 88 | 54 | 95 | 44 | 71 | -1 | .2 | .1 | .2 | .6 | 36 | 4.6 | 68 | 54 | 14 | 2 | 0 | 2 | 0 |
| IL CHICAGO | 95 | 71 | 100 | 58 | 83 | 10 | .4 | -.4 | .4 | 4.2 | 51 | 12.8 | 61 | 83 | 40 | 6 | 0 | 1 | 0 |
| MOLINE | 96 | 71 | 101 | 58 | 84 | 9 | .3 | -.6 | .3 | 3.2 | 33 | 12.1 | 51 | 90 | 36 | 6 | 0 | 1 | 0 |
| PEORIA | 97 | 71 | 102 | 58 | 84 | 9 | T | -.8 | T | 1.0 | 11 | 9.8 | 44 | 92 | 33 | 6 | 0 | 1 | 0 |
| QUINCY | 98 | 72 | 103 | 62 | 85 | 9 | .4 | -.5 | .4 | 3.4 | 37 | 9.6 | 41 | 88 | 33 | 6 | 0 | 1 | 0 |
| ROCKFORD | 95 | 68 | 101 | 58 | 82 | 9 | .5 | -.4 | .5 | 3.4 | 34 | 12.9 | 56 | 89 | 36 | 5 | 0 | 1 | 1 |
| SPRINGFIELD | 94 | 73 | 98 | 66 | 83 | 7 | .8 | -.1 | .8 | 3.1 | 40 | 12.4 | 57 | 92 | 44 | 5 | 0 | 1 | 1 |
| IN EVANSVILLE | 93 | 71 | 96 | 69 | 82 | 4 | .6 | -.2 | .5 | 8.3 | 102 | 21.5 | 79 | 98 | 57 | 6 | 0 | 3 | 1 |
| FORT WAYNE | 91 | 70 | 95 | 65 | 81 | 8 | .5 | -.3 | .5 | 7.7 | 101 | 19.1 | 87 | 97 | 51 | 5 | 0 | 1 | 0 |
| INDIANAPOLIS | 92 | 71 | 95 | 67 | 81 | 7 | .5 | -.3 | .5 | 5.6 | 62 | 19.3 | 77 | 95 | 49 | 6 | 0 | 2 | 1 |
| SOUTH BEND | 96 | 72 | 103 | 65 | 84 | 12 | 2.0 | 1.1 | 1.5 | 3.8 | 45 | 15.3 | 67 | 92 | 38 | 6 | 0 | 2 | 2 |
| IA DES MOINES | 96 | 71 | 102 | 60 | 83 | 8 | T | -.9 | T | 7.6 | 93 | 11.4 | 58 | 85 | 35 | 6 | 0 | 1 | 0 |
| SIOUX CITY | 93 | 67 | 100 | 56 | 80 | 4 | .2 | -.5 | .2 | 3.7 | 47 | 10.4 | 61 | 87 | 40 | 5 | 0 | 2 | 0 |
| WATERLOO | 97 | 68 | 105 | 53 | 83 | 10 | .3 | -.6 | .3 | 4.9 | 51 | 10.7 | 50 | 85 | 33 | 6 | 0 | 1 | 0 |
| KS CONCORDIA | 96 | 71 | 102 | 61 | 84 | 4 | T | -.7 | T | 4.8 | 59 | 10.6 | 59 | 74 | 34 | 6 | 0 | 1 | 0 |
| DODGE CITY | 94 | 69 | 98 | 67 | 81 | 1 | .6 | 0 | .6 | 2.7 | 41 | 10.9 | 77 | 85 | 38 | 6 | 0 | 1 | 1 |
| GOODLAND | 90 | 64 | 98 | 55 | 77 | 2 | 3.0 | 2.5 | 2.6 | 8.3 | 151 | 17.3 | 152 | 85 | 36 | 5 | 0 | 3 | 1 |
| TOPEKA | 95 | 70 | 98 | 58 | 82 | 4 | .1 | -.7 | .1 | 5.0 | 51 | 14.3 | 67 | 87 | 40 | 7 | 0 | 1 | 0 |
| WICHITA | 96 | 73 | 101 | 70 | 84 | 3 | 1.0 | .3 | .9 | 3.8 | 46 | 14.2 | 79 | 85 | 39 | 6 | 0 | 2 | 1 |
| KY BOWLING GREEN | 89 | 70 | 95 | 69 | 80 | 2 | .1 | -.7 | .1 | 6.2 | 65 | 20.5 | 64 | 100 | 61 | 5 | 0 | 1 | 0 |
| LEXINGTON | 92 | 70 | 97 | 69 | 81 | 5 | 1.0 | .1 | .7 | 5.1 | 51 | 19.4 | 65 | 92 | 48 | 5 | 0 | 3 | 1 |
| LOUISVILLE | 94 | 72 | 97 | 70 | 83 | 5 | 1.3 | .5 | .7 | 6.9 | 83 | 23.6 | 84 | 91 | 50 | 6 | 0 | 3 | 2 |
| LA ALEXANDRIA | 95 | 74 | 100 | 69 | 85 | 1 | .1 | -.9 | .1 | 5.8 | 62 | 24.1 | 71 | 87 | 45 | 7 | 0 | 3 | 0 |
| BATON ROUGE | 94 | 75 | 97 | 72 | 85 | 3 | 3.6 | 2.3 | 2.6 | 14.2 | 124 | 45.2 | 126 | 96 | 54 | 7 | 0 | 4 | 2 |
| LAKE CHARLES | 93 | 74 | 95 | 72 | 83 | 1 | 2.4 | 1.2 | 1.0 | 14.1 | 135 | 34.9 | 112 | 97 | 59 | 6 | 0 | 5 | 3 |
| NEW ORLEANS | 89 | 73 | 93 | 71 | 81 | -1 | 1.7 | .3 | .6 | 19.3 | 153 | 54.1 | 146 | 100 | 65 | 4 | 0 | 5 | 1 |

**Based on 1951-80 normals**

## Weather Data for the Week Ending August 6, 1988

| STATES AND STATIONS | TEMPERATURE °F | | | | | | PRECIPITATION | | | | | | | RELATIVE HUMIDITY, PERCENT | | NUMBER OF DAYS | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | | | | | | | | TEMPERATURE °F | | PRECIPITATION | |
| | AVERAGE MAXIMUM | AVERAGE MINIMUM | EXTREME HIGH | EXTREME LOW | AVERAGE | DEPARTURE FROM NORMAL | WEEKLY TOTAL, IN. | DEPARTURE FROM NORMAL | GREATEST IN 24-HOUR, IN. | TOTAL, IN., SINCE June 1 | PCT. NORMAL SINCE June 1 | TOTAL, IN., SINCE JAN 1 | PCT. NORMAL SINCE JAN 1 | AVERAGE MAXIMUM | AVERAGE MINIMUM | 90 AND ABOVE | 32 AND BELOW | .01 INCH OR MORE | .50 INCH OR MORE |
| SHREVEPORT | 98 | 72 | 102 | 70 | 85 | 2 | T | -.6 | T | 3.3 | 43 | 16.7 | 59 | 93 | 40 | 7 | 0 | 1 | 0 |
| ME CARIBOU | 84 | 63 | 90 | 53 | 73 | 9 | 2.5 | 1.6 | .9 | 7.1 | 89 | 17.6 | 86 | 98 | 51 | 2 | 0 | 5 | 3 |
| PORTLAND | 87 | 68 | 93 | 65 | 78 | 9 | .3 | -.3 | .3 | 8.3 | 130 | 23.4 | 94 | 97 | 61 | 2 | 0 | 1 | 0 |
| MD BALTIMORE | 91 | 72 | 93 | 70 | 82 | 5 | .1 | -1.0 | .1 | 4.7 | 55 | 20.4 | 81 | 95 | 51 | 7 | 0 | 1 | 0 |
| SALISBURY | 90 | 71 | 93 | 70 | 81 | 4 | .2 | -1.1 | .2 | 9.3 | 102 | 29.3 | 110 | 97 | 55 | 4 | 0 | 2 | 0 |
| MA BOSTON | 89 | 72 | 95 | 67 | 80 | 7 | .1 | -.7 | .1 | 8.9 | 142 | 23.2 | 92 | 93 | 57 | 4 | 0 | 1 | 0 |
| CHATHAM | 80 | 66 | 83 | 61 | 73 | 5 | .1 | -.8 | .1 | 6.8 | 106 | 22.2 | 83 | 98 | 81 | 0 | 0 | 1 | 0 |
| MI ALPENA | 91 | 64 | 102 | 53 | 78 | 11 | 1.8 | 1.1 | .7 | 5.2 | 77 | 14.7 | 86 | 96 | 47 | 5 | 0 | 3 | 3 |
| DETROIT | 93 | 72 | 99 | 66 | 83 | 10 | .4 | -.3 | .4 | 3.8 | 54 | 10.7 | 56 | 93 | 44 | 5 | 0 | 2 | 0 |
| FLINT | 92 | 69 | 98 | 61 | 80 | 10 | .9 | .2 | .9 | 5.3 | 79 | 12.5 | 71 | 94 | 46 | 5 | 0 | 1 | 1 |
| GRAND RAPIDS | 93 | 70 | 98 | 61 | 81 | 9 | T | -.7 | T | 4.0 | 55 | 13.8 | 70 | 90 | 43 | 4 | 0 | 1 | 0 |
| HOUGHTON LAKE | 89 | 67 | 94 | 47 | 78 | 11 | 1.1 | .4 | .8 | 4.4 | 68 | 12.4 | 75 | 85 | 46 | 4 | 0 | 2 | 1 |
| LANSING | 94 | 70 | 100 | 63 | 82 | 12 | .4 | -.3 | .4 | 3.1 | 45 | 11.8 | 67 | 92 | 40 | 5 | 0 | 1 | 0 |
| MARQUETTE | 81 | 60 | 95 | 46 | 70 | 6 | 4.0 | 3.3 | 2.1 | 6.0 | 79 | 17.5 | 79 | 97 | 57 | 1 | 0 | 6 | 3 |
| MUSKEGON | 89 | 71 | 94 | 59 | 80 | 9 | .2 | -.5 | .2 | 2.3 | 42 | 13.1 | 74 | 87 | 49 | 4 | 0 | 2 | 0 |
| SAULT ST. MARIE | 81 | 60 | 93 | 51 | 70 | 6 | .7 | 0 | .2 | 3.3 | 48 | 13.9 | 77 | 98 | 59 | 1 | 0 | 5 | 0 |
| MN ALEXANDRIA | 88 | 66 | 100 | 58 | 77 | 6 | 2.0 | 1.2 | 1.0 | 4.8 | 62 | 10.3 | 65 | 86 | 43 | 3 | 0 | 4 | 2 |
| DULUTH | 81 | 59 | 93 | 55 | 70 | 4 | 2.4 | 1.4 | 1.3 | 7.9 | 91 | 15.8 | 88 | 99 | 57 | 2 | 0 | 6 | 2 |
| INT'L FALLS | 80 | 58 | 93 | 54 | 69 | 3 | 1.7 | 1.0 | 1.0 | 8.2 | 101 | 11.9 | 80 | 97 | 56 | 1 | 0 | 4 | 1 |
| MINNEAPOLIS | 94 | 69 | 105 | 64 | 81 | 8 | 2.4 | 1.6 | 1.0 | 3.8 | 46 | 10.1 | 59 | 81 | 36 | 5 | 0 | 4 | 2 |
| ROCHESTER | 92 | 66 | 102 | 60 | 79 | 9 | .7 | -.1 | .3 | 3.4 | 41 | 11.1 | 63 | 86 | 40 | 5 | 0 | 3 | 0 |
| MS GREENWOOD | 95 | 73 | 96 | 71 | 84 | 2 | .6 | -.1 | .6 | 3.5 | 41 | 16.3 | 47 | 91 | 44 | 7 | 0 | 1 | 1 |
| JACKSON | 96 | 72 | 97 | 69 | 84 | 2 | .1 | -.8 | 0 | 2.9 | 34 | 22.1 | 65 | 99 | 46 | 7 | 0 | 2 | 0 |
| MERIDIAN | 94 | 71 | 97 | 68 | 83 | 1 | .8 | -.1 | .3 | 6.2 | 65 | 25.6 | 72 | 97 | 50 | 7 | 0 | 3 | 0 |
| MO CAPE GIRARDEAU | 94 | 74 | 95 | 72 | 84 | — | .2 | -.7 | .1 | 3.3 | 42 | 17.7 | 63 | 97 | 53 | 7 | 0 | 3 | 0 |
| COLUMBIA | 95 | 71 | 98 | 67 | 83 | 5 | .4 | -.3 | .4 | 3.1 | 42 | 15.4 | 67 | 94 | 40 | 6 | 0 | 1 | 0 |
| KANSAS CITY | 97 | 72 | 102 | 60 | 84 | 4 | .2 | -.6 | .2 | 3.2 | 34 | 11.0 | 49 | 83 | 34 | 6 | 0 | 1 | 0 |
| SAINT LOUIS | 96 | 77 | 99 | 75 | 87 | 8 | T | -.6 | T | 5.0 | 64 | 17.9 | 81 | 82 | 41 | 6 | 0 | 0 | 0 |
| SPRINGFIELD | 92 | 70 | 94 | 68 | 81 | 3 | .3 | -.4 | .3 | 10.4 | 120 | 28.0 | 115 | 94 | 47 | 6 | 0 | 1 | 0 |
| MT BILLINGS | 88 | 61 | 96 | 52 | 74 | 2 | T | -.2 | T | .5 | 16 | 6.0 | 59 | 54 | 21 | 4 | 0 | 0 | 0 |
| GLASGOW | 89 | 60 | 97 | 53 | 74 | 3 | T | -.3 | T | 2.9 | 64 | 5.4 | 70 | 57 | 19 | 4 | 0 | 1 | 0 |
| GREAT FALLS | 83 | 51 | 96 | 44 | 67 | -3 | T | -.3 | T | 3.3 | 82 | 7.3 | 68 | 58 | 21 | 2 | 0 | 1 | 0 |
| HAVRE | 84 | 53 | 94 | 41 | 69 | -2 | 0 | -.3 | 0 | 2.7 | 72 | 3.8 | 46 | 62 | 21 | 3 | 0 | 0 | 0 |
| HELENA | 86 | 53 | 96 | 47 | 70 | 1 | T | -.3 | T | 1.9 | 57 | 6.2 | 79 | 58 | 16 | 2 | 0 | 0 | 0 |
| KALISPELL | 83 | 47 | 94 | 43 | 65 | -1 | .2 | -.1 | .2 | 2.5 | 76 | 8.9 | 92 | 85 | 20 | 2 | 0 | 1 | 0 |
| MILES CITY | 90 | 67 | 101 | 55 | 78 | 3 | T | -.3 | T | .8 | 17 | 2.1 | 21 | 58 | 21 | 4 | 0 | 1 | 0 |
| MISSOULA | 84 | 47 | 96 | 43 | 66 | -2 | .1 | -.1 | .1 | 2.3 | 81 | 8.4 | 100 | 76 | 19 | 2 | 0 | 2 | 0 |
| NE GRAND ISLAND | 92 | 65 | 100 | 53 | 79 | 2 | 1.0 | .4 | .8 | 9.3 | 136 | 15.0 | 94 | 85 | 41 | 5 | 0 | 2 | 1 |
| LINCOLN | 96 | 69 | 102 | 59 | 82 | 5 | T | -.8 | T | 1.8 | 24 | 8.2 | 46 | 80 | 34 | 6 | 0 | 1 | 0 |
| NORFOLK | 91 | 66 | 99 | 53 | 79 | 3 | 1.2 | .6 | 1.1 | 7.1 | 89 | 16.0 | 95 | 88 | 42 | 5 | 0 | 2 | 1 |
| NORTH PLATTE | 90 | 63 | 96 | 50 | 76 | 2 | .6 | .1 | .6 | 6.8 | 96 | 13.5 | 94 | 88 | 42 | 5 | 0 | 1 | 1 |
| OMAHA | 91 | 70 | 99 | 58 | 81 | 3 | .4 | -.6 | .3 | 5.8 | 69 | 13.9 | 72 | 79 | 46 | 5 | 0 | 2 | 0 |
| SCOTTSBLUFF | 90 | 61 | 98 | 58 | 76 | 1 | .6 | .3 | .5 | 3.7 | 74 | 13.2 | 119 | 87 | 29 | 5 | 0 | 2 | 1 |
| VALENTINE | 92 | 64 | 104 | 52 | 78 | 3 | 2.8 | 2.2 | 2.8 | 8.4 | 142 | 16.8 | 137 | 75 | 34 | 5 | 0 | 1 | 1 |
| NV ELY | 82 | 51 | 91 | 42 | 67 | -1 | 1.1 | 1.0 | .5 | 1.9 | 123 | 5.7 | 98 | 88 | 34 | 2 | 0 | 4 | 1 |
| LAS VEGAS | 101 | 78 | 105 | 74 | 89 | -1 | .1 | -.1 | .1 | .1 | 13 | 1.8 | 75 | 56 | 22 | 7 | 0 | 1 | 0 |
| RENO | 92 | 57 | 97 | 51 | 74 | 6 | T | -.1 | T | .8 | 136 | 2.4 | 52 | 60 | 15 | 5 | 0 | 0 | 0 |
| WINNEMUCCA | 92 | 51 | 98 | 44 | 71 | 0 | .2 | .1 | .2 | .7 | 65 | 4.3 | 87 | 43 | 11 | 5 | 0 | 1 | 0 |
| NH CONCORD | 90 | 68 | 95 | 64 | 79 | 10 | .4 | -.3 | .4 | 7.3 | 113 | 19.0 | 91 | 99 | 50 | 5 | 0 | 1 | 0 |
| NJ ATLANTIC CITY | 89 | 71 | 93 | 68 | 80 | 5 | T | -1.1 | T | 5.6 | 72 | 19.6 | 79 | 98 | 57 | 2 | 0 | 0 | 0 |
| NM ALBUQUERQUE | 89 | 66 | 92 | 64 | 77 | -1 | T | -.4 | T | 3.5 | 167 | 6.7 | 157 | 75 | 31 | 3 | 0 | 1 | 0 |
| CLOVIS | 88 | 63 | 91 | 60 | 75 | -2 | T | -.6 | T | 8.0 | 132 | 14.8 | 142 | 90 | 40 | 1 | 0 | 0 | 0 |
| ROSWELL | 92 | 67 | 95 | 65 | 79 | -1 | .1 | -.4 | 0 | 5.8 | 184 | 11.2 | 205 | 84 | 34 | 5 | 0 | 2 | 0 |
| NY ALBANY | 90 | 68 | 94 | 62 | 79 | 8 | .9 | .1 | .6 | 5.4 | 79 | 17.1 | 83 | 97 | 53 | 4 | 0 | 2 | 1 |
| BINGHAMTON | 86 | 67 | 90 | 61 | 76 | 7 | .3 | -.5 | .3 | 6.3 | 82 | 19.9 | 91 | 93 | 51 | 1 | 0 | 2 | 0 |
| BUFFALO | 88 | 70 | 96 | 60 | 79 | 8 | .1 | -.8 | .1 | 8.0 | 124 | 22.4 | 108 | 90 | 50 | 4 | 0 | 1 | 0 |
| NEW YORK | 90 | 76 | 92 | 72 | 83 | 6 | T | -1.0 | T | 9.4 | 123 | 24.1 | 96 | 87 | 54 | 3 | 0 | 0 | 0 |
| ROCHESTER | 89 | 68 | 95 | 60 | 78 | 7 | .2 | -.5 | .1 | 5.6 | 94 | 14.2 | 77 | 93 | 49 | 4 | 0 | 2 | 0 |
| SYRACUSE | 90 | 69 | 95 | 60 | 79 | 8 | .2 | -.6 | .1 | 8.3 | 103 | 19.5 | 85 | 88 | 52 | 4 | 0 | 3 | 0 |
| NC ASHEVILLE | 87 | 66 | 92 | 63 | 76 | 2 | .7 | -.3 | .5 | 4.3 | 51 | 14.7 | 54 | 99 | 49 | 2 | 0 | 3 | 0 |
| CHARLOTTE | 91 | 72 | 96 | 71 | 82 | 2 | 1.3 | .5 | .7 | 6.4 | 79 | 18.8 | 68 | 96 | 48 | 5 | 0 | 4 | 1 |
| GREENSBORO | 90 | 71 | 93 | 69 | 81 | 3 | T | -1.0 | T | 7.7 | 85 | 19.7 | 75 | 96 | 53 | 3 | 0 | 0 | 0 |
| HATTERAS | 87 | 74 | 89 | 71 | 80 | 1 | 2.4 | 1.1 | 1.0 | 5.6 | 52 | 25.9 | 83 | 97 | 66 | 0 | 0 | 5 | 2 |
| NEW BERN | 91 | 75 | 96 | 73 | 83 | 3 | 1.7 | .3 | .7 | 12.2 | 92 | 32.4 | 100 | 94 | 59 | 5 | 0 | 5 | 2 |
| RALEIGH | 91 | 71 | 94 | 68 | 81 | 3 | .1 | -.9 | .1 | 5.7 | 64 | 19.4 | 74 | 97 | 51 | 6 | 0 | 3 | 0 |
| WILMINGTON | 91 | 73 | 94 | 71 | 82 | 2 | 3.4 | 1.9 | 1.7 | 19.2 | 132 | 41.8 | 127 | 96 | 59 | 4 | 0 | 5 | 2 |
| ND BISMARCK | 86 | 61 | 98 | 56 | 74 | 2 | 1.3 | .9 | .6 | 4.0 | 76 | 7.3 | 68 | 87 | 33 | 3 | 0 | 5 | 2 |
| FARGO | 89 | 63 | 98 | 56 | 76 | 5 | .5 | -.2 | .4 | 2.2 | 32 | 6.9 | 53 | 91 | 39 | 3 | 0 | 3 | 0 |
| GRAND FORKS | 84 | 60 | 96 | 52 | 72 | 3 | .9 | .2 | .9 | 5.6 | 90 | 8.6 | 74 | 93 | 43 | 2 | 0 | 2 | 1 |
| WILLISTON | 89 | 56 | 105 | 48 | 73 | 2 | T | -.3 | T | 4.0 | 85 | 7.2 | 76 | 69 | 22 | 3 | 0 | 1 | 0 |
| OH AKRON-CANTON | 89 | 69 | 95 | 64 | 79 | 7 | .1 | -.7 | .1 | 5.5 | 70 | 16.2 | 71 | 91 | 50 | 3 | 0 | 2 | 0 |
| CINCINNATI | 92 | 69 | 97 | 66 | 80 | 5 | 1.0 | .3 | .4 | 8.7 | 97 | 25.7 | 98 | 94 | 48 | 4 | 0 | 4 | 0 |
| CLEVELAND | 91 | 69 | 97 | 63 | 80 | 8 | 1.2 | .4 | 1.1 | 5.2 | 70 | 16.1 | 74 | 92 | 47 | 5 | 0 | 2 | 1 |
| COLUMBUS | 90 | 70 | 94 | 67 | 80 | 6 | .2 | -.7 | .2 | 9.3 | 107 | 22.8 | 95 | 96 | 54 | 5 | 0 | 2 | 0 |

## Weather Data for the Week Ending August 6, 1988

| STATES AND STATIONS | TEMPERATURE °F | | | | | | PRECIPITATION | | | | | | | RELATIVE HUMIDITY, PERCENT | | NUMBER OF DAYS | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | | | | | | | | TEMPERATURE °F | | PRECIPITATION | |
| | AVERAGE MAXIMUM | AVERAGE MINIMUM | EXTREME HIGH | EXTREME LOW | AVERAGE | DEPARTURE FROM NORMAL | WEEKLY TOTAL, IN. | DEPARTURE FROM NORMAL | GREATEST IN 24-HOUR, IN. | TOTAL, IN., SINCE June 1 | PCT. NORMAL SINCE June 1 | TOTAL, IN., SINCE JAN 1 | PCT. NORMAL SINCE JAN 1 | AVERAGE MAXIMUM | AVERAGE MINIMUM | 90 AND ABOVE | 32 AND BELOW | .01 INCH OR MORE | .50 INCH OR MORE |
| DAYTON | 91 | 71 | 96 | 66 | 81 | 6 | .1 | -.6 | .1 | 5.3 | 68 | 17.2 | 76 | 91 | 51 | 4 | 0 | 3 | 0 |
| TOLEDO | 92 | 69 | 96 | 62 | 81 | 9 | .3 | -.5 | .2 | 4.3 | 59 | 11.3 | 57 | 94 | 49 | 5 | 0 | 2 | 0 |
| YOUNGSTOWN | 89 | 65 | 96 | 57 | 77 | 7 | .4 | -.4 | .4 | 6.5 | 78 | 17.6 | 76 | 93 | 49 | 4 | 0 | 2 | 0 |
| OK OKLAHOMA CITY | 95 | 73 | 97 | 72 | 84 | 2 | .1 | -.5 | .1 | 5.6 | 77 | 19.3 | 97 | 82 | 37 | 7 | 0 | 1 | 0 |
| TULSA | 94 | 75 | 97 | 74 | 85 | 1 | T | -.6 | T | 4.8 | 56 | 17.8 | 74 | 83 | 45 | 7 | 0 | 1 | 0 |
| OR ASTORIA | 69 | 50 | 85 | 48 | 60 | -1 | T | -.3 | T | 4.5 | 118 | 30.5 | 82 | 95 | 61 | 0 | 0 | 0 | 0 |
| BURNS | 83 | 46 | 91 | 41 | 65 | -5 | .2 | .1 | .2 | 1.2 | 130 | 4.9 | 84 | 58 | 14 | 1 | 0 | 1 | 0 |
| MEDFORD | 94 | 57 | 104 | 50 | 75 | 3 | T | -.1 | T | 1.0 | 106 | 6.8 | 65 | 68 | 16 | 5 | 0 | 0 | 0 |
| PENDLETON | 85 | 58 | 95 | 53 | 71 | -2 | T | -.1 | T | .3 | 31 | 7.3 | 105 | 51 | 18 | 2 | 0 | 0 | 0 |
| PORTLAND | 81 | 55 | 94 | 52 | 68 | 0 | 0 | -.2 | 0 | 3.0 | 150 | 19.4 | 97 | 86 | 36 | 2 | 0 | 0 | 0 |
| SALEM | 84 | 48 | 96 | 43 | 66 | -1 | 0 | -.1 | 0 | 2.0 | 124 | 18.8 | 86 | 88 | 30 | 2 | 0 | 0 | 0 |
| PA ALLENTOWN | 89 | 72 | 90 | 69 | 80 | 6 | .1 | -.9 | .1 | 8.0 | 95 | 25.4 | 97 | 94 | 52 | 2 | 0 | 1 | 0 |
| ERIE | 88 | 69 | 93 | 60 | 78 | 8 | .7 | -.2 | .4 | 6.1 | 75 | 18.7 | 84 | 85 | 47 | 4 | 0 | 3 | 0 |
| HARRISBURG | 90 | 71 | 93 | 69 | 81 | 5 | .6 | -.1 | .6 | 6.0 | 80 | 21.9 | 92 | 95 | 53 | 5 | 0 | 1 | 1 |
| PHILADELPHIA | 92 | 74 | 94 | 73 | 83 | 6 | 0 | -.9 | 0 | 8.7 | 101 | 24.3 | 97 | 96 | 51 | 7 | 0 | 0 | 0 |
| PITTSBURGH | 90 | 69 | 94 | 63 | 79 | 7 | .3 | -.5 | .2 | 4.4 | 55 | 16.6 | 70 | 88 | 55 | 4 | 0 | 3 | 0 |
| SCRANTON | 87 | 69 | 91 | 65 | 78 | 6 | 1.7 | .9 | 1.1 | 8.2 | 110 | 20.8 | 101 | 92 | 51 | 2 | 0 | 2 | 2 |
| RI PROVIDENCE | 87 | 71 | 91 | 66 | 79 | 6 | .1 | -.8 | .1 | 6.7 | 102 | 24.7 | 95 | 98 | 61 | 2 | 0 | 1 | 0 |
| SC CHARLESTON | 92 | 74 | 97 | 73 | 83 | 3 | 1.2 | -.4 | .7 | 7.7 | 50 | 19.7 | 59 | 97 | 55 | 6 | 0 | 4 | 1 |
| COLUMBIA | 95 | 72 | 99 | 68 | 84 | 2 | .8 | -.5 | .6 | 5.7 | 52 | 18.9 | 59 | 94 | 43 | 7 | 0 | 5 | 1 |
| FLORENCE | 93 | 73 | 96 | 72 | 83 | 2 | .8 | -.4 | .7 | 9.2 | 81 | 22.1 | 77 | 97 | 50 | 6 | 0 | 2 | 1 |
| GREENVILLE | 94 | 70 | 98 | 68 | 82 | 3 | 1.4 | .5 | 1.3 | 6.9 | 71 | 21.6 | 66 | 97 | 46 | 6 | 0 | 5 | 1 |
| SD ABERDEEN | 89 | 64 | 102 | 50 | 76 | 4 | 2.7 | 2.3 | 1.9 | 6.8 | 114 | 11.4 | 90 | 88 | 42 | 3 | 0 | 3 | 2 |
| HURON | 90 | 64 | 106 | 51 | 77 | 3 | 1.6 | 1.1 | .9 | 3.8 | 65 | 13.3 | 102 | 89 | 42 | 4 | 0 | 2 | 2 |
| RAPID CITY | 88 | 61 | 104 | 53 | 74 | 1 | 1.7 | 1.4 | 1.0 | 3.2 | 58 | 8.1 | 66 | 84 | 34 | 4 | 0 | 3 | 2 |
| SIOUX FALLS | 92 | 68 | 107 | 54 | 80 | 6 | 1.0 | .3 | .7 | 2.4 | 34 | 9.3 | 60 | 86 | 38 | 4 | 0 | 2 | 1 |
| TN CHATTANOOGA | 94 | 71 | 98 | 69 | 83 | 3 | 2.5 | 1.6 | 1.5 | 8.7 | 102 | 25.0 | 75 | 98 | 48 | 6 | 0 | 3 | 2 |
| KNOXVILLE | 92 | 70 | 95 | 69 | 81 | 3 | 2.2 | 1.4 | 1.7 | 6.3 | 70 | 20.7 | 67 | 97 | 51 | 5 | 0 | 2 | 1 |
| MEMPHIS | 93 | 77 | 95 | 75 | 85 | 3 | T | -.8 | T | 7.4 | 89 | 24.6 | 73 | 87 | 54 | 7 | 0 | 1 | 0 |
| NASHVILLE | 95 | 72 | 99 | 70 | 84 | 4 | .5 | -.3 | .3 | 4.2 | 52 | 16.1 | 51 | 96 | 47 | 7 | 0 | 3 | 0 |
| TX ABILENE | 92 | 71 | 96 | 69 | 81 | -3 | .2 | -.4 | .2 | 5.7 | 113 | 11.6 | 85 | 84 | 37 | 6 | 0 | 1 | 0 |
| AMARILLO | 88 | 65 | 89 | 64 | 77 | -2 | T | -.7 | T | 7.0 | 104 | 16.8 | 134 | 87 | 40 | 0 | 0 | 0 | 0 |
| AUSTIN | 96 | 75 | 100 | 73 | 85 | 0 | .1 | -.3 | .1 | 5.5 | 105 | 14.1 | 77 | 95 | 43 | 7 | 0 | 2 | 0 |
| BEAUMONT | 94 | 75 | 95 | 74 | 84 | 1 | 1.2 | -.1 | .5 | 9.8 | 82 | 26.8 | 83 | 97 | 55 | 7 | 0 | 3 | 1 |
| BROWNSVILLE | 95 | 76 | 97 | 75 | 86 | 1 | .1 | -.4 | .1 | 3.9 | 87 | 11.1 | 96 | 95 | 47 | 7 | 0 | 1 | 0 |
| CORPUS CHRISTI | 95 | 76 | 99 | 74 | 85 | 1 | .7 | .1 | .5 | 4.1 | 62 | 8.5 | 53 | 97 | 49 | 7 | 0 | 2 | 1 |
| DEL RIO | 88 | 72 | 93 | 70 | 80 | -6 | 2.0 | 1.6 | .7 | 8.1 | 221 | 10.0 | 104 | 86 | 52 | 2 | 0 | 6 | 2 |
| EL PASO | 88 | 67 | 93 | 64 | 78 | -4 | 1.3 | 1.0 | .8 | 4.7 | 194 | 6.1 | 156 | 91 | 42 | 3 | 0 | 4 | 1 |
| FORT WORTH | 99 | 76 | 103 | 71 | 87 | 1 | T | -.4 | T | 5.7 | 119 | 14.2 | 74 | 82 | 35 | 7 | 0 | 0 | 0 |
| GALVESTON | 90 | 81 | 92 | 80 | 86 | 2 | .3 | -.6 | .2 | 8.5 | 105 | 22.7 | 105 | 80 | 57 | 4 | 0 | 3 | 0 |
| HOUSTON | 95 | 74 | 98 | 72 | 84 | 1 | 1.1 | .3 | .6 | 6.3 | 73 | 16.4 | 61 | 97 | 49 | 7 | 0 | 2 | 2 |
| LUBBOCK | 93 | 66 | 97 | 65 | 80 | 0 | T | -.5 | T | 3.9 | 72 | 9.1 | 82 | 95 | 39 | 6 | 0 | 0 | 0 |
| MIDLAND | 90 | 65 | 93 | 62 | 78 | -4 | .2 | -.2 | .2 | 7.7 | 226 | 11.2 | 145 | 96 | 41 | 4 | 0 | 1 | 0 |
| SAN ANGELO | 91 | 69 | 96 | 66 | 80 | -4 | .3 | 0 | .3 | 3.7 | 112 | 9.5 | 96 | 93 | 42 | 6 | 0 | 2 | 0 |
| SAN ANTONIO | 93 | 75 | 98 | 73 | 84 | -1 | .7 | .2 | .4 | 11.8 | 222 | 15.6 | 95 | 96 | 48 | 5 | 0 | 2 | 0 |
| VICTORIA | 95 | 76 | 101 | 74 | 85 | 1 | .1 | -.4 | .1 | 4.6 | 62 | 9.0 | 44 | 96 | 48 | 7 | 0 | 2 | 0 |
| WACO | 101 | 74 | 105 | 69 | 87 | 1 | .3 | -.1 | .2 | 7.0 | 153 | 14.1 | 75 | 90 | 36 | 7 | 0 | 2 | 0 |
| WICHITA FALLS | 100 | 74 | 103 | 72 | 87 | 1 | .1 | -.3 | .1 | 3.5 | 69 | 13.6 | 84 | 80 | 30 | 7 | 0 | 2 | 0 |
| UT BLANDING | 86 | 58 | 89 | 55 | 72 | -1 | .7 | .3 | .4 | 2.5 | 141 | 7.1 | 115 | 78 | 43 | 0 | 0 | 3 | 0 |
| CEDAR CITY | 87 | 59 | 90 | 57 | 73 | -1 | 1.1 | .8 | .6 | 2.5 | 139 | 9.8 | 160 | 89 | 32 | 1 | 0 | 5 | 1 |
| SALT LAKE CITY | 90 | 66 | 98 | 59 | 78 | 1 | .2 | 0 | .1 | .3 | 15 | 6.4 | 65 | 62 | 23 | 4 | 0 | 3 | 0 |
| VT BURLINGTON | 91 | 69 | 97 | 61 | 80 | 11 | .3 | -.7 | .1 | 5.9 | 75 | 13.5 | 70 | 88 | 44 | 4 | 0 | 2 | 0 |
| VA NORFOLK | 90 | 73 | 96 | 72 | 82 | 3 | .2 | -1.1 | .1 | 6.8 | 70 | 23.8 | 88 | 97 | 50 | 5 | 0 | 2 | 0 |
| RICHMOND | 92 | 71 | 94 | 69 | 82 | 3 | 1.0 | -.3 | 1.0 | 10.7 | 110 | 25.7 | 98 | 99 | 51 | 7 | 0 | 1 | 1 |
| ROANOKE | 89 | 68 | 93 | 65 | 78 | 2 | .1 | -.8 | .1 | 7.5 | 100 | 17.9 | 75 | 96 | 53 | 2 | 0 | 2 | 0 |
| WA QUILLAYUTE | 72 | 49 | 87 | 44 | 60 | 1 | T | -.5 | T | 4.1 | 69 | 56.2 | 99 | 94 | 51 | 0 | 0 | 0 | 0 |
| SEATTLE-TACOMA | 78 | 54 | 90 | 51 | 66 | 1 | 0 | -.2 | 0 | 2.1 | 92 | 16.8 | 84 | 87 | 40 | 1 | 0 | 0 | 0 |
| SPOKANE | 83 | 55 | 90 | 46 | 69 | -1 | T | -.1 | T | 1.3 | 75 | 8.7 | 90 | 62 | 19 | 1 | 0 | 0 | 0 |
| YAKIMA | 86 | 51 | 95 | 49 | 69 | -2 | 0 | -.1 | 0 | 1.0 | 132 | 3.5 | 78 | 76 | 23 | 2 | 0 | 0 | 0 |
| WV BECKLEY | 84 | 66 | 90 | 63 | 75 | 5 | .5 | -.4 | .3 | 7.1 | 75 | 19.2 | 71 | 94 | 56 | 1 | 0 | 2 | 0 |
| CHARLESTON | 91 | 69 | 98 | 66 | 80 | 5 | 1.7 | .6 | 1.6 | 4.1 | 42 | 15.7 | 57 | 96 | 49 | 5 | 0 | 3 | 1 |
| HUNTINGTON | 89 | 69 | 97 | 67 | 79 | 4 | .5 | -.5 | .5 | 8.1 | 90 | 20.7 | 78 | 98 | 53 | 4 | 0 | 1 | 0 |
| PARKERSBURG | 89 | 70 | 94 | 67 | 79 | 4 | .4 | -.5 | .4 | 6.4 | 74 | 16.6 | 68 | 95 | 56 | 5 | 0 | 1 | 0 |
| WI GREEN BAY | 92 | 69 | 99 | 60 | 80 | 11 | .8 | .1 | .5 | 3.8 | 54 | 10.0 | 59 | 89 | 43 | 5 | 0 | 2 | 0 |
| LACROSSE | 97 | 71 | 105 | 65 | 84 | 11 | .2 | -.6 | .1 | 5.9 | 68 | 12.0 | 63 | 85 | 37 | 5 | 0 | 3 | 0 |
| MADISON | 94 | 70 | 101 | 59 | 82 | 11 | .3 | -.6 | .2 | 4.8 | 57 | 11.9 | 62 | 86 | 36 | 6 | 0 | 2 | 0 |
| MILWAUKEE | 95 | 73 | 103 | 65 | 84 | 13 | .9 | .1 | .9 | 3.1 | 40 | 13.6 | 70 | 81 | 36 | 5 | 0 | 1 | 1 |
| WAUSAU | 91 | 67 | 100 | 61 | 79 | 10 | .6 | -.4 | .4 | 5.1 | 58 | 10.5 | 55 | 86 | 41 | 5 | 0 | 3 | 0 |
| WY CASPER | 89 | 58 | 99 | 52 | 74 | 2 | .2 | 0 | .1 | 1.0 | 41 | 4.7 | 59 | 66 | 19 | 3 | 0 | 3 | 0 |
| CHEYENNE | 83 | 58 | 91 | 54 | 71 | 2 | 1.0 | .7 | .9 | 4.8 | 116 | 12.2 | 128 | 86 | 28 | 1 | 0 | 2 | 1 |
| LANDER | 87 | 59 | 98 | 51 | 73 | 2 | .5 | .4 | .5 | 1.0 | 48 | 5.7 | 62 | 51 | 18 | 3 | 0 | 2 | 0 |
| SHERIDAN | 88 | 58 | 100 | 50 | 73 | 2 | .2 | 0 | .1 | .8 | 25 | 7.4 | 72 | 71 | 23 | 4 | 0 | 2 | 0 |
| PR SAN JUAN | 89 | 78 | 90 | 77 | 83 | 1 | .6 | -.7 | .5 | 6.2 | 56 | 30.3 | 109 | 88 | 66 | 1 | 0 | 2 | 1 |

# July Weather and Crop Summary

## WEATHER

HIGHLIGHTS: A series of slow moving frontal systems triggered scattered showers and thunderstorms and eased long-term dryness over much of the eastern half of the Nation. Drought still plagued much of northern and central Great Plains and Mississippi Valley, however. Hot, humid weather prevailed over most of the country. The heat was abnormally severe across the northeastern and north-central States and over much of the West. The high temperatures in the West contributed to the unusual number of forest fires.

JULY 1 - 2...High pressure dominated the central and eastern United States, causing sunny skies and moderate temperatures. Showers were scattered across the South. Much of the Nation continued to suffer from long-term drought.

JULY 3 - 9...Record-breaking high temperatures and continued lack of rain worsened drought conditions in the Corn Belt. The heat also affected the Northeast, Southwest, and North-central regions, though a cold front brought rain and lower temperatures to the Plains States by the end of the week. Thunderstorms dropped heavy rains in scattered locations from Texas eastward to Georgia and Florida. The Pacific Northwest was cool.

JULY 10 - 16...Record-high temperatures continued to be set as temperatures again soared to over 100 degrees throughout much of the Nation. Substantial rain from scattered thunderstorms over the eastern two-thirds of the United States brought relief to some of the drought stricken areas. Heavy rain caused local flooding in central and northeastern Texas during the first part of the week.

JULY 17 - 23...A frontal system moved through the eastern half of the Nation, bringing badly needed rain and short-term relief to much of the areas suffering from drought. Cool Canadian air settled into the central United States by midweek, but the West continued to be plagued with record heat.

JULY 24 - 30...Showers and thunderstorms continued to ease long-term dryness over much of the eastern half of the Nation. Thunderstorms were scattered over the Southwest through the week. The severe heat in the West spread into the central United States.

JULY 31...Beneficial showers were spread from the upper Ohio Valley to the Northeast. Hot, humid air prevailed over much of the Nation.

## CROP DEVELOPMENT

July began with crops still suffering from the effects of the drought through the Great Plains, Corn Belt, Delta, Applachian States, Southeast, and Rocky Mountain States. The drought was most pronounced in the central and eastern Corn Belt. Early in the month, precipitation improved crops in the central Great Plains, Delta, and Southeast, but high temperatures and the shortage of moisture continued taking its toll on crops in the central and eastern Corn Belt. The second week of July, moisture provided more relief from the drought in the northern Corn Belt, central and southern Great Plains, Delta, Appalachian States, and Southeast. Shortly after midmonth rain arrived in the central and eastern Corn Belt, but crops showed little improvement. The precipitation gave most crops a boost in the central and southern Great Plains, Delta, and Southeast. As the month drew to a close, high temperatures returned, depleting soil moisture and stressing crops in the northern Great Plains. Much of the gain accomplished in restoring soil moisture earlier in the month was lost as temperatures approached or exceeded the century mark in the western Corn Belt, Great Plains, and northern Rocky Mountain States. In the central and eastern Corn Belt, crops responded to additional moisture but it may be too late to help some crops.

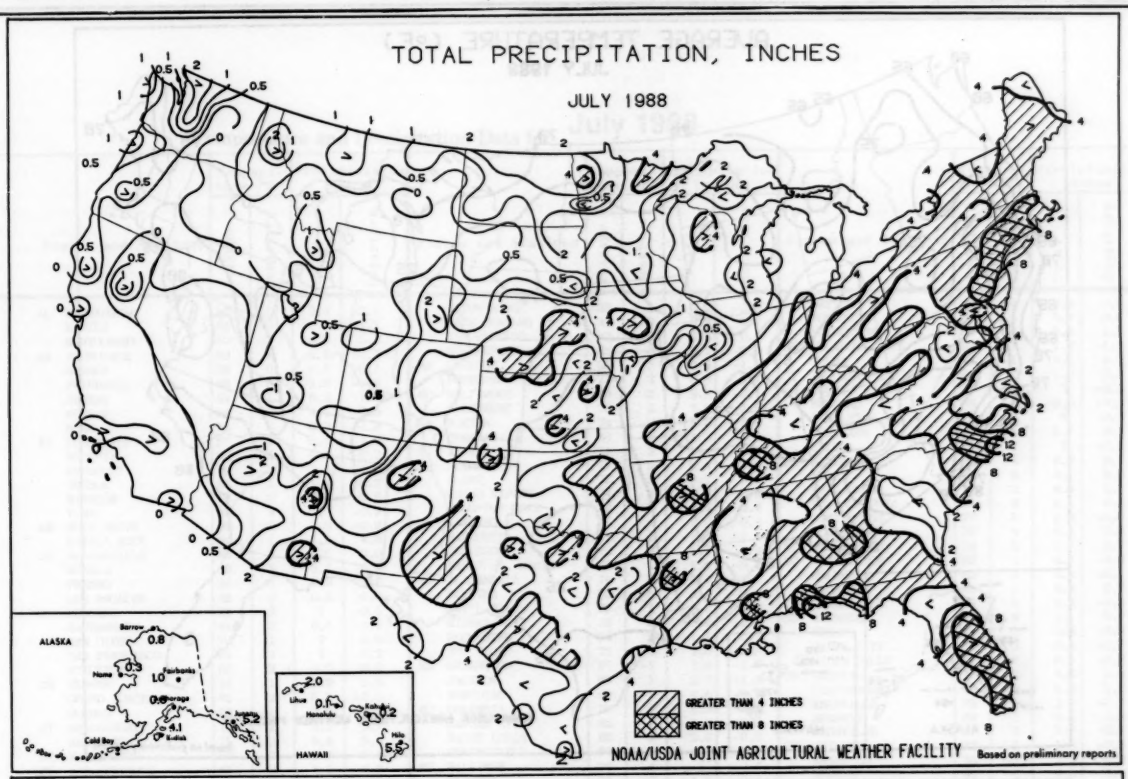
During July, corn was mostly fair to poor. However, condition was mostly poor to fair in the central and eastern Corn Belt. The hot, dry weather forced corn through the silking stage much faster than normal but curbed growth and ear formation. On July 31, silking was 90 percent finished, compared with 94 percent in 1987 and 79 percent normally. Nineteen percent of the acreage had ears in the dough stage of beyond, but lagged 4 points behind normal. Harvest was underway in Alabama, Georgia, Louisiana and Texas.

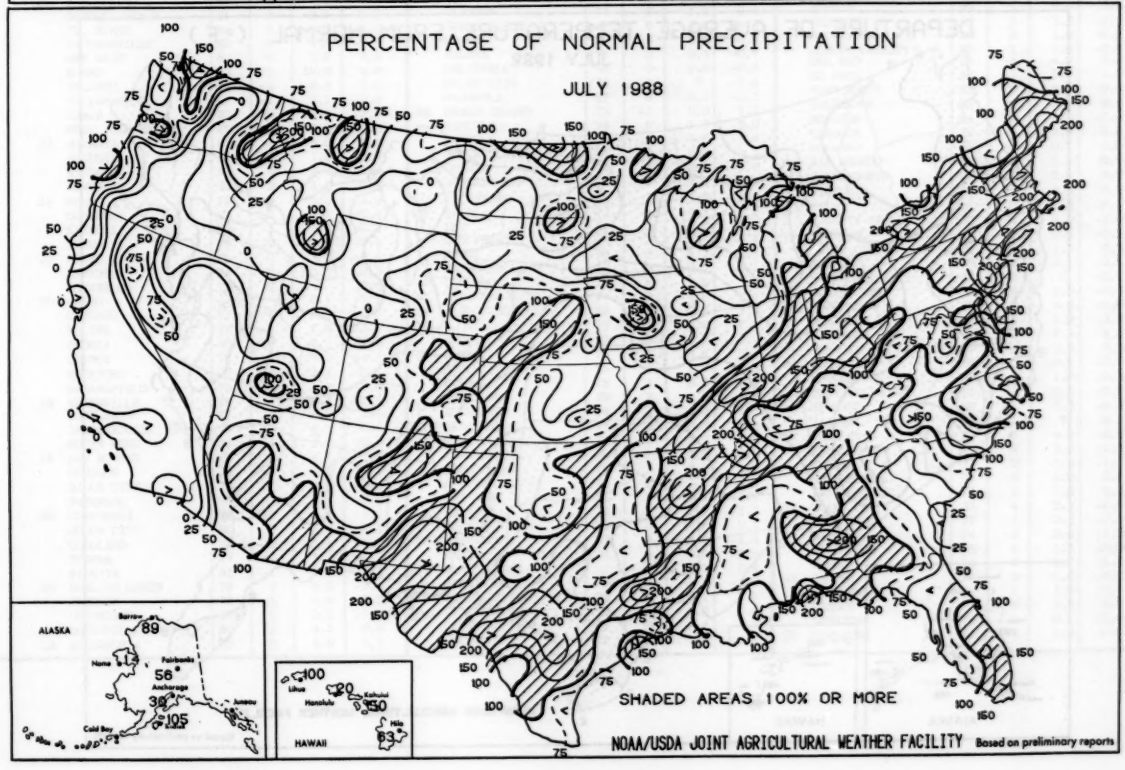
Soybeans were mostly fair during July. The crop responded to moisture, especially near the end of the month and in the central and eastern Corn Belt. Dryness and high temperatures caused problems in the northern Great Plains as the month ended. On July 31, 76 percent of the acreage had bloomed and 41 percent was setting pods. Normally 72 percent would be blooming and 34 percent would be setting pods. In some major producing States insects compounded the effects of the drought.

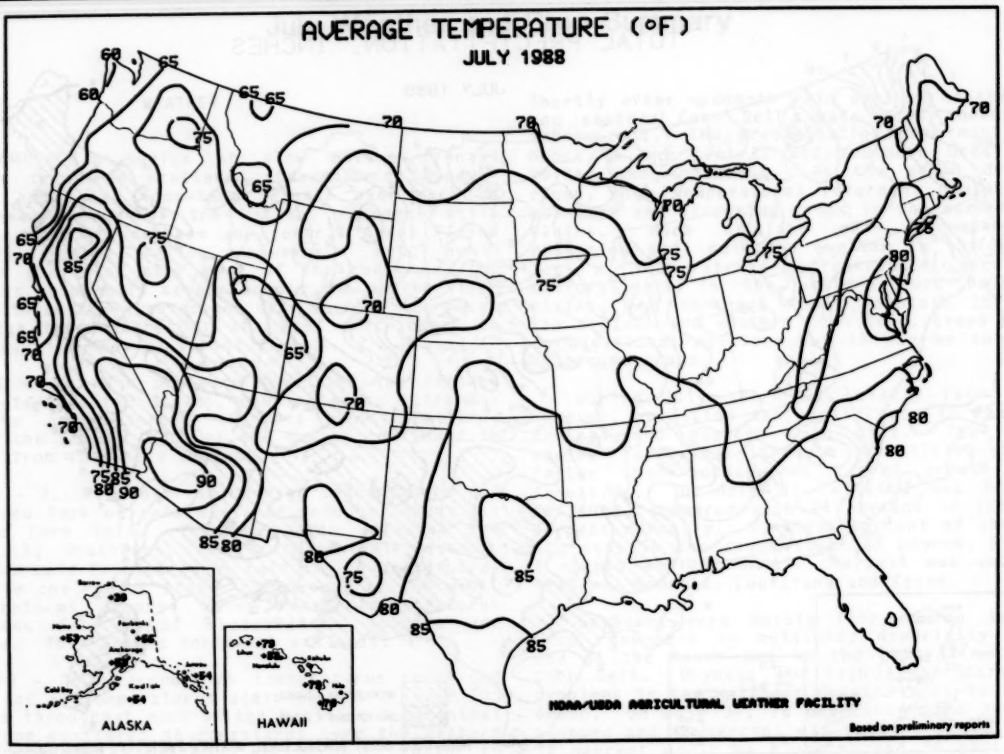
Sorghum was 44 percent headed, 11 points slower than in 1987 but 3 points faster than normal. Twenty-eight percent of the acreage turned color, compared with 31 percent in 1987 and 32 percent normally. Harvest was ending in most southern areas of Texas. Harvest was underway in some southeastern States.

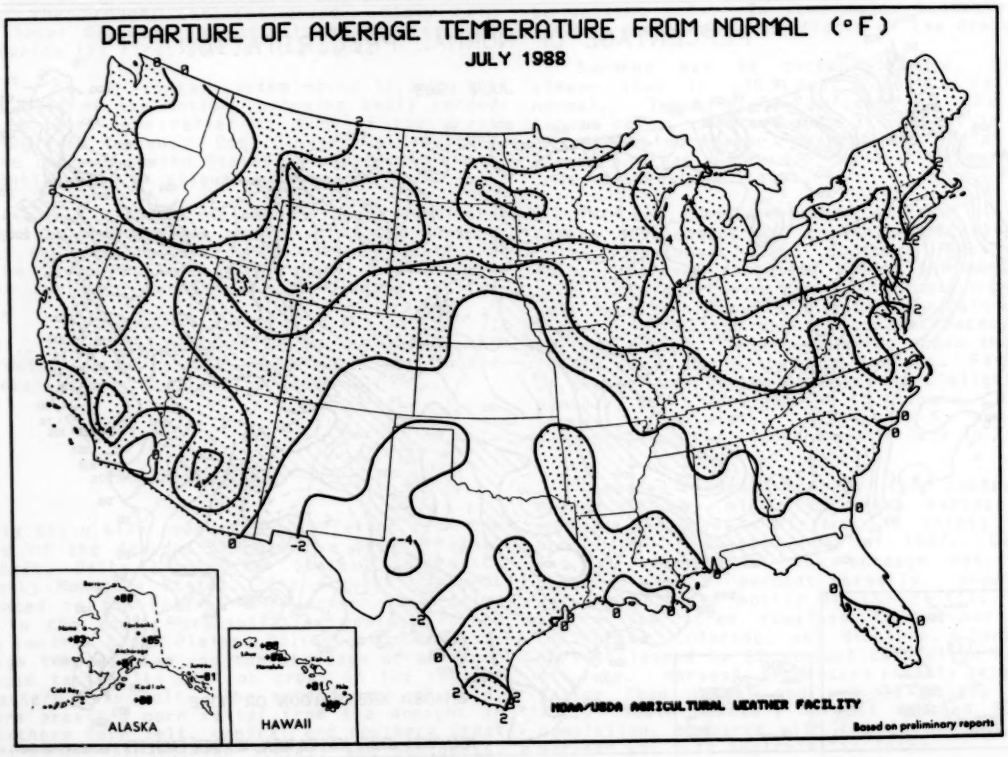
The hot, humid weather was well suited to cotton development and growth, especially in the Delta, Southeast, and southern Great Plains. Cotton improved steadily, ending the month mostly good to fair. During the month, cotton progressed well in California and Arizona. In California and Texas, some cotton aborted squares because of hot weather stress. Cotton squaring ended the month 7 points above the 62 percent average. Five percent of the acreage had bolls open, just slightly above normal. Bolls were opening in Alabama, California, Georgia, Louisiana, Mississippi, and Texas. Harvest began the second week of July in Texas.

Combines roared through the central Great Plains and by mid-July, wheat harvest was 82 percent finished. This was 10 points ahead of normal and 7 points ahead of 1987. By month's end, 91 percent of the acreage was combined, compared with 87 percent normally. Wheat harvest was concentrated mostly in the Pacific Northwest but a few acres remained to be harvested in California, Colorado, and Michigan. Spring wheat harvest leaped to 52 percent completion by the end of July. Harvest progressed nearly eight times faster than normal and was 35 points ahead of 1987. South Dakota's harvest reached 90 percent completion, compared with the 29 percent average. Harvest was just beginning in Idaho.


TOTAL PRECIPITATION, INCHES
JULY 1988
ALASKA
HAWAII
GREATER THAN 4 INCHES
GREATER THAN 8 INCHES
NOAA/USDA JOINT AGRICULTURAL WEATHER FACILITY
Based on preliminary reports


PERCENTAGE OF NORMAL PRECIPITATION
JULY 1988
ALASKA
HAWAII
SHADED AREAS 100% OR MORE
NOAA/USDA JOINT AGRICULTURAL WEATHER FACILITY
Based on preliminary reports


AVERAGE TEMPERATURE (°F)
JULY 1988
ALASKA
HAWAII
NOAA/USDA AGRICULTURAL WEATHER FACILITY
Based on preliminary reports


DEPARTURE OF AVERAGE TEMPERATURE FROM NORMAL (°F)
JULY 1988
ALASKA
HAWAII
NOAA/USDA AGRICULTURAL WEATHER FACILITY
Based on preliminary reports

## Temperature and Precipitation Data for July 1988

| States and Stations | Temperature °F Average | Temperature °F Departure | Precipitation Inches Total | Precipitation Inches Departure |
|---|---|---|---|---|
| AL BIRMINGHAM | 80 | 0 | 3.3 | -2.1 |
| MOBILE | 82 | 0 | 6.0 | -1.7 |
| MONTGOMERY | 80 | -2 | 10.0 | 5.2 |
| AK ANCHORAGE | 59 | 1 | 0.6 | -1.3 |
| BARROW | 39 | 0 | 0.7 | -0.1 |
| FAIRBANKS | 66 | 5 | 1.0 | -0.8 |
| JUNEAU | 54 | -1 | 5.2 | 1.1 |
| KODIAK | 54 | 0 | 4.1 | 0.5 |
| NOME | 53 | 3 | 0.3 | -1.9 |
| AZ FLAGSTAFF | 67 | 1 | 3.5 | 1.0 |
| PHOENIX | 96 | 4 | 0.9 | 0.2 |
| PRESCOTT | 76 | 3 | 3.5 | 0.3 |
| TUCSON | 88 | 2 | 1.7 | -0.7 |
| WINSLOW | 79 | 0 | 0.6 | -0.5 |
| YUMA | 93 | 0 | T | -0.2 |
| AR FORT SMITH | 84 | 1 | 2.3 | -0.8 |
| LITTLE ROCK | 81 | -1 | 8.5 | 4.9 |
| CA BAKERSFIELD | 86 | 2 | 0.0 | 0.0 |
| EUREKA | 59 | 3 | 0.1 | 0.0 |
| FRESNO | 86 | 5 | 0.0 | 0.0 |
| LOS ANGELES | 69 | 0 | 0.0 | 0.0 |
| REDDING | 87 | 3 | T | -0.2 |
| SACRAMENTO | 81 | 5 | 0.0 | -0.1 |
| SAN DIEGO | 70 | 1 | T | 0.0 |
| SAN FRANCISCO | 65 | 3 | T | 0.0 |
| STOCKTON | 80 | 2 | 0.0 | 0.0 |
| CO DENVER | 74 | 1 | 2.2 | 0.3 |
| GRAND JUNCTION | 81 | 2 | 0.2 | -0.3 |
| PUEBLO | 76 | -1 | 2.0 | 0.2 |
| CT BRIDGEPORT | 75 | 2 | 8.5 | 5.1 |
| HARTFORD | 75 | 2 | 8.4 | 5.4 |
| DC WASHINGTON | 82 | 3 | 3.7 | -0.1 |
| FL APALACHICOLA | 81 | 0 | 8.0 | 0.9 |
| DAYTONA BEACH | 81 | 0 | 2.9 | -2.6 |
| FT. MYERS | 84 | 1 | 5.6 | -3.0 |
| JACKSONVILLE | 82 | -1 | 4.5 | -1.9 |
| KEY WEST | 84 | 0 | 5.8 | 2.2 |
| MIAMI | 83 | 1 | 10.9 | 4.9 |
| ORLANDO | 81 | -2 | 9.4 | 1.4 |
| TALLAHASSEE | 81 | -1 | 6.7 | -2.0 |
| TAMPA | 83 | 0 | 3.4 | -3.9 |
| WEST PALM BEACH | 82 | 0 | 9.0 | 3.0 |
| GA ATLANTA | 81 | 2 | 5.0 | 0.3 |
| AUGUSTA | 81 | 1 | 1.8 | -2.6 |
| MACON | 81 | 0 | 3.4 | -1.0 |
| SAVANNAH | 83 | 2 | 1.8 | -5.6 |
| HI HILO | 76 | 0 | 5.5 | -3.2 |
| HONOLULU | 82 | 2 | 0.1 | -0.4 |
| KAHULUI | 79 | 1 | 0.2 | -0.2 |
| LIHUE | 79 | 0 | 2.0 | -0.1 |
| ID BOISE | 75 | 0 | T | -0.2 |
| LEWISTON | 74 | 0 | 0.3 | -0.3 |
| POCATELLO | 73 | 2 | T | -0.4 |
| IL CAIRO | — | - | 6.1 | 2.1 |
| CHICAGO | 77 | 4 | 2.7 | -0.6 |
| MOLINE | 78 | 3 | 1.8 | -3.1 |
| PEORIA | 79 | 4 | 0.3 | -3.7 |
| QUINCY | 78 | 2 | 0.1 | -4.2 |
| ROCKFORD | 77 | 3 | 2.4 | -2.1 |
| SPRINGFIELD | 79 | 2 | 1.7 | -1.8 |
| IN EVANSVILLE | 79 | 1 | 6.6 | 2.7 |
| FORT WAYNE | 77 | 4 | 6.5 | 3.1 |
| INDIANAPOLIS | 78 | 3 | 4.7 | 0.4 |
| SOUTH BEND | 76 | 4 | 1.3 | -2.4 |
| IA DES MOINES | 78 | 2 | 4.8 | 1.6 |
| DUBUQUE | 76 | 4 | 2.0 | 2.3 |
| SIOUX CITY | 76 | 1 | 2.9 | -0.4 |
| WATERLOO | 76 | 3 | 1.5 | -3.2 |
| KS CONCORDIA | 79 | -1 | 1.7 | -1.7 |
| DODGE CITY | 80 | 0 | 2.0 | -1.1 |
| GOODLAND | 76 | 0 | 3.4 | 1.1 |
| TOPEKA | 77 | -2 | 1.7 | -2.3 |
| WICHITA | 81 | -1 | 0.9 | -2.7 |
| KY BOWLING GREEN | 78 | 0 | 4.0 | -0.4 |
| JACKSON | 78 | 5 | 4.6 | 0.3 |
| LEXINGTON | 79 | 3 | 3.5 | -1.4 |
| LOUISVILLE | 80 | 2 | 4.7 | 0.6 |
| LA ALEXANDRIA | 83 | 0 | 4.6 | 0.1 |
| BATON ROUGE | 83 | 1 | 6.5 | -0.6 |
| LAKE CHARLES | 82 | 0 | 6.0 | 0.7 |
| NEW ORLEANS | 82 | 0 | 6.8 | 0.1 |
| SHREVEPORT | 83 | 0 | 3.1 | -0.5 |
| ME CARIBOU | 68 | 3 | 2.3 | -1.7 |
| PORTLAND | 71 | 3 | 5.9 | 3.1 |
| MD BALTIMORE | 80 | 3 | 3.8 | -0.1 |
| SALISBURY | 79 | 2 | 7.4 | 3.0 |
| MA BOSTON | 74 | 0 | 7.6 | 5.0 |
| CHATHAM | 68 | 0 | 4.5 | 1.6 |
| MI ALPENA | 71 | 5 | 2.6 | -0.5 |
| DETROIT | 77 | 5 | 2.4 | -0.7 |
| FLINT | 75 | 5 | 3.7 | 0.9 |
| GRAND RAPIDS | 74 | 3 | 3.7 | 0.8 |
| HOUGHTON LAKE | 72 | 5 | 2.5 | -0.4 |
| LANSING | 75 | 4 | 2.6 | 0.0 |
| MARQUETTE | 67 | 3 | 1.5 | -1.8 |
| MUSKEGON | 73 | 2 | 1.7 | -0.8 |
| SAULT ST. MARIE | 67 | 4 | 2.1 | -0.8 |
| MN ALEXANDRIA | 76 | 6 | 2.1 | -1.0 |
| DULUTH | 70 | 5 | 1.1 | -2.9 |
| INT'L FALLS | 68 | 2 | 3.0 | -0.8 |
| MINNEAPOLIS | 78 | 5 | 1.2 | -2.3 |
| ROCHESTER | 74 | 3 | 1.1 | -2.7 |
| ST. CLOUD | 75 | 5 | 2.6 | -0.8 |
| MS GREENWOOD | 81 | -1 | 2.8 | -1.7 |
| JACKSON | 83 | 1 | 2.7 | -1.9 |
| MERIDIAN | 80 | -1 | 4.6 | -0.7 |
| MO COLUMBIA | 79 | 0 | 2.3 | -0.9 |
| KANSAS CITY | 80 | -1 | 1.2 | -2.9 |
| SAINT LOUIS | 82 | 3 | 3.0 | -0.6 |
| SPRINGFIELD | 77 | -1 | 4.8 | 1.2 |
| MT BILLINGS | 76 | 4 | T | -0.8 |
| GLASGOW | 74 | 3 | 1.3 | -0.4 |
| GREAT FALLS | 69 | 0 | 1.8 | 0.7 |
| HAVRE | 70 | 0 | 0.9 | -0.4 |
| HELENA | 71 | 3 | 0.4 | -0.7 |
| KALISPELL | 65 | 0 | 0.9 | -0.1 |
| MILES CITY | 78 | 4 | T | -1.5 |
| MISSOULA | 67 | 0 | 0.5 | -0.3 |
| NE GRAND ISLAND | 75 | -1 | 3.9 | 1.2 |
| LINCOLN | 78 | 0 | 1.2 | -2.0 |
| NORFOLK | 75 | 0 | 4.6 | 1.4 |
| NORTH PLATTE | 75 | 0 | 3.0 | 0.1 |
| OMAHA | 77 | -1 | 2.6 | -1.0 |
| SCOTTSBLUFF | 75 | 0 | 0.9 | -1.1 |
| VALENTINE | 75 | 1 | 2.3 | -0.1 |
| NV ELKO | 72 | 2 | 0.1 | -0.2 |
| ELY | 69 | 2 | 0.2 | -0.5 |
| LAS VEGAS | 93 | 2 | T | -0.4 |
| RENO | 75 | 6 | 0.2 | -0.1 |
| WINNEMUCCA | 76 | 4 | 0.1 | -0.1 |
| NH CONCORD | 72 | 3 | 6.5 | 3.6 |
| NJ ATLANTIC CITY | 77 | 3 | 4.6 | 0.6 |
| NM ALBUQUERQUE | 78 | -1 | 2.3 | 1.0 |
| CLOVIS | 75 | -3 | 3.9 | 1.1 |
| ROSWELL | 79 | -2 | 4.5 | 3.1 |
| NY ALBANY | 75 | 3 | 3.1 | 0.1 |
| BINGHAMTON | 73 | 4 | 4.9 | 1.5 |
| BUFFALO | 75 | 4 | 6.4 | 3.4 |
| NEW YORK | 79 | 2 | 8.5 | 4.8 |
| ROCHESTER | 74 | 2 | 4.3 | 1.8 |
| SYRACUSE | 74 | 3 | 5.7 | 2.0 |
| NC ASHEVILLE | 74 | 0 | 2.7 | -1.2 |
| CHARLOTTE | 80 | 1 | 3.6 | -0.3 |
| GREENSBORO | 78 | 1 | 4.5 | 0.2 |
| HATTERAS | 78 | 0 | 1.9 | -3.5 |
| NEW BERN | 81 | 2 | 5.1 | -1.7 |
| RALEIGH | 79 | 1 | 2.7 | -1.7 |
| WILMINGTON | 80 | 0 | 14.5 | 7.1 |
| ND BISMARCK | 73 | 3 | 0.5 | -1.5 |
| FARGO | 76 | 5 | 0.5 | -2.9 |
| GRAND FORKS | 71 | 3 | 3.7 | 0.8 |
| WILLISTON | 73 | 3 | 0.5 | -1.3 |
| OH AKRON-CANTON | 76 | 5 | 5.1 | 1.1 |
| CINCINNATI | 79 | 3 | 6.9 | 2.6 |
| CLEVELAND | 76 | 4 | 3.4 | 0.1 |
| COLUMBUS | 77 | 3 | 7.8 | 3.8 |
| DAYTON | 78 | 4 | 3.8 | 0.4 |
| TOLEDO | 76 | 4 | 3.8 | 0.6 |
| YOUNGSTOWN | 74 | 4 | 5.3 | 1.3 |
| OK OKLAHOMA CITY | 82 | -1 | 1.9 | -1.1 |
| TULSA | 83 | -1 | 4.2 | 0.7 |
| OR ASTORIA | 60 | 0 | 1.0 | -0.1 |
| BURNS | 69 | 0 | T | -0.2 |
| MEDFORD | 76 | 3 | 0.0 | -0.2 |
| P.._DLETON | 72 | -2 | T | -0.3 |
| PORTLAND | 69 | 1 | 0.7 | 0.3 |
| SALEM | 67 | 1 | T | -0.3 |
| PA ALLENTOWN | 78 | 4 | 6.2 | 2.1 |
| ERIE | 74 | 5 | 4.1 | 0.8 |
| HARRISBURG | 79 | 3 | 4.4 | 1.1 |
| PHILADELPHIA | 81 | 4 | 8.1 | 4.2 |
| PITTSBURGH | 77 | 5 | 2.8 | -1.0 |
| SCRANTON | 76 | 4 | 6.2 | 2.9 |
| RI PROVIDENCE | 74 | 2 | 5.7 | 2.7 |
| SC CHARLESTON | 82 | 1 | 4.1 | -3.2 |
| COLUMBIA | 82 | 1 | 3.2 | -2.1 |
| FLORENCE | 81 | 1 | 6.4 | 0.7 |
| GREENVILLE | 79 | 0 | 2.2 | -2.3 |
| SD ABERDEEN | 76 | 4 | 3.1 | 0.7 |
| HURON | 77 | 3 | 1.4 | -0.8 |
| RAPID CITY | 76 | 3 | 0.4 | -1.7 |
| SIOUX FALLS | 77 | 3 | 0.5 | -2.2 |
| TN BRISTAL | 77 | 2 | 3.2 | 1.0 |
| CHATTANOOGA | 79 | 0 | 5.9 | 1.3 |
| KNOXVILLE | 79 | 1 | 3.6 | -0.7 |
| MEMPHIS | 82 | -1 | 5.2 | 1.2 |
| NASHVILLE | 81 | 2 | 3.3 | -0.6 |
| TX ABILENE | 82 | -2 | 1.8 | -0.3 |
| AMARILLO | 76 | -3 | 3.3 | 0.6 |
| AUSTIN | 85 | 0 | 2.8 | 0.9 |
| BEAUMONT | 84 | 1 | 3.8 | -2.1 |
| BROWNSVILLE | 86 | 2 | 1.0 | -0.5 |
| CORPUS CHRISTI | 85 | 1 | 1.8 | -0.6 |
| DEL RIO | 84 | -2 | 4.3 | 2.6 |
| EL PASO | 80 | -3 | 3.4 | 1.8 |
| FORT WORTH | 85 | 0 | 2.5 | 0.3 |
| GALVESTON | 83 | 0 | 5.8 | 2.1 |
| HOUSTON | 84 | 1 | 3.2 | -0.3 |
| LUBBOCK | 79 | -1 | 2.9 | 0.6 |
| MIDLAND | 78 | -4 | 6.7 | 5.0 |
| SAN ANGELO | 81 | -3 | 1.2 | 0.0 |
| SAN ANTONIO | 85 | 0 | 5.6 | 3.7 |
| VICTORIA | 85 | 1 | 2.8 | 0.2 |
| WACO | 86 | 0 | 1.2 | -0.6 |
| WICHITA FALLS | 85 | -1 | 1.0 | -1.0 |
| UT BLANDING | 74 | 1 | 0.5 | -0.5 |
| CEDAR CITY | 76 | 2 | 1.3 | 0.2 |
| MILFORD | 76 | 2 | 0.1 | -0.5 |
| SALT LAKE CITY | 81 | 3 | T | -0.7 |
| VT BURLINGTON | 73 | 4 | 2.6 | -0.8 |
| VA LYNCHBURG | 78 | 2 | 3.0 | -0.9 |
| NORFOLK | 80 | 2 | 2.9 | -2.2 |
| RICHMOND | 80 | 2 | 7.5 | 2.4 |
| ROANOKE | 77 | 1 | 3.8 | 0.3 |
| WA COLEVILLE | 65 | -3 | 0.1 | -0.7 |
| QUILLAYUTE | 60 | 1 | 1.8 | -0.9 |
| SEATTLE-TACOMA | 65 | 1 | 0.5 | -0.2 |
| SPOKANE | 69 | -1 | 0.2 | -0.3 |
| YAKIMA | 69 | -1 | T | 0.1 |
| WV BECKLEY | 73 | 3 | 4.6 | -0.2 |
| CHARLESTON | 79 | 4 | 3.0 | -2.3 |
| ELKINS | 71 | 2 | 3.6 | -1.1 |
| HUNTINGTON | 78 | 2 | 6.9 | 2.1 |
| PARKERSBURG | 77 | 2 | 5.3 | 1.2 |
| WI GREEN BAY | 73 | 4 | 2.3 | -0.9 |
| LACROSSE | 77 | 4 | 2.4 | -1.4 |
| MADISON | 74 | 3 | 2.4 | -1.3 |
| MILWAUKEE | 75 | 5 | 1.5 | -2.0 |
| WAUSAU | 74 | 4 | 2.7 | -1.3 |
| WY CASPER | 74 | 3 | 0.6 | -0.5 |
| CHEYENNE | 70 | 1 | 1.8 | -0.1 |
| LANDER | 75 | 5 | 0.3 | -0.4 |
| SHERIDAN | 75 | 5 | 0.1 | -0.9 |
| PR SAN JUAN | 84 | 2 | 4.0 | -0.9 |

# National Agricultural Summary

AUGUST 1 to 7, 1988

HIGHLIGHTS: Hot, dry weather persisted through most of the eastern half of the Nation, but precipitation gave some relief in the central and northern Great Plains, Southeast, northwestern Corn Belt, and Indiana. Crop condition remained fairly stable but without moisture began declining in some States. Despite additional precipitation, soil moisture was mostly short. Fieldwork averaged 5 to 6 days in most areas but was limited to less than 3 days in South Dakota.

Winter wheat was 94 percent (%) harvested, 4 percentage points ahead of 1987 and the 5-year average. Harvest was limited mostly to the Pacific Northwest. Spring wheat harvest was 52 percentage points ahead of normal at 71% completion. Corn silking reached 95% completion, 3 points below 1987 but 3 points above normal. Forty-three percent of the acreage reached the dough stage and 12% reached dent. Normally, 39% would be in the dough stage and 12% would be in dent. Soybeans blooming was slightly ahead of normal at 84% completion. Pod setting was 11 points ahead of normal at 62% completion. Sorghum was 57% headed, compared with 70% in 1987 and 54% normally. Twenty-two percent of the acreage turned color, trailing 1 point behind normal. Cotton setting bolls advanced 16 points and was 6 points ahead of the 78% average. Bolls were open on 7% of the acreage, compared with 5% normally. Rice was 43% headed, 12 points below average. Livestock was mostly fair to good.

SMALL GRAINS: Winter wheat was 94% harvested, compared with 90% in 1987 and average. Harvest was finished except in Colorado, California, Idaho, Montana, Oregon, and Washington. In Montana, harvest jumped 23 points ahead of the previous week to 93% completion. Harvest was 62 points ahead of normal and 72 points above 1987. Oregon's harvest increased 44 points but still lagged 3 points behind the 63% average. In Washington, harvest reached the halfway point but was slightly behind normal. Idaho's harvest was 12 points ahead of normal at 40% completion. Spring wheat harvest surged 19 points ahead of the previous week to 71% completion. This compares with 33% harvested in 1987 and 19% harvested normally. Harvest was virtually finished in South Dakota. Montana's harvest was more than 9 times greater than the 5% average. North Dakota's producers harvested more than one-fourth of their acreage, ending the week 78% finished. Minnesota's harvest reached 63% completion, more than doubling the average. Idaho's harvest was 16 points ahead of normal.

CORN: Precipitation across the central Great Plains, northwestern Corn Belt, Indiana, and Missouri did little to improve corn. Crop condition remained fair to poor and began declining in some States. In the 17 major producing States, 43% of the acreage reached the dough stage, compared with 62% in 1987 and 39% normally. Silking was virtually finished except in Colorado, Michigan, Ohio, Pennsylvania, South Dakota, and Wisconsin. Corn reaching the dough stage lagged behind in Georgia, Indiana, Kentucky, Michigan, North Carolina, Ohio, Pennsylvania, and Texas. Corn was maturing slower than normal in most Corn Belt and Southeastern States. Harvest was underway in Georgia, Alabama, Louisiana, South Carolina, and Texas.

SOYBEANS: Rain provided much needed moisture for soybeans in the Southeast. In Georgia, soybeans responded to improved moisture. Kansas soybean fields were weedy because of dry weather effect on herbicides. In Missouri, the drought continued hindering crop development, but most soybeans need rain to fill pods. Ohio's soybeans were overtaken by velvetleaf. Spider mites advanced further into fields. Moisture should help soybeans considerably in South Dakota. In the 19 major producing States, 84% of the acreage reached the blooming stage, just slightly ahead of normal. Soybeans setting pods climbed 21 points ahead of the previous week and was 11 points ahead of the 51% average. Setting pods trailed behind normal in most Delta, Appalachian, and Southeastern States.

COTTON: Cotton was mostly good to fair in the eastern half of the Nation and mostly good in the Southwestern States. Armyworms and aphids caused some cotton to drop fruit in Georgia. The hot weather promoted growth in Oklahoma. Cotton harvest reached 6% completion in Texas. Fields along the Upper Coast and southern areas were defoliated. Bolls began opening in central and Blackland areas. In California and Arizona, cotton progressed well but continued dropping squares and bolls from heat stress in California. In the 14 major producing States, bolls were present on 85% of the acreage, compared with 86% in 1987 and 78% normally. Seven percent of the acreage was opening bolls, just slightly ahead of normal. Bolls were not opening in 7 of the 14 major producing States.

SORGHUM: Sorghum was 57% headed, 3 points ahead of normal. Twenty-two percent of the acreage turned color, lagging slightly behind 1987 and average. In Texas, harvest reached 45% completion. Rain delayed the completion of harvest in central areas. Harvest was underway in South Carolina, Alabama, and Louisiana.

OTHER CROPS: Rice was 43% headed, 25 points below 1987 and 12 points below normal. Heading was behind normal in all States except Texas. Texas' acreage was 15% harvested, 7 points below normal. Harvest was underway in Louisiana.

Peanuts were fair to good in the Southeast. Most acreage reached the pegging stage in Georgia and Alabama. Peanuts grew well across much of Texas. Many dryland fields could use additional rain. Pegging was 90% finished in Oklahoma, 5 points ahead of normal.

Tobacco harvest continued throughout the Southeast. Tobacco blooming and topping was active in Kentucky and Tennessee.

FRUITS AND NUTS: Florida's citrus groves and new crop fruit were good. Soil moisture was adequate but fruit size varied in some areas. New crop citrus sized well in Texas. Spraying continued in most groves. Nectarine, table grape, plum, apple, peach, and citrus harvests continued in California. Wine grape and prune harvests got underway. Growers prepared almond orchards for harvest. Walnuts were treated for codling moth. New crop citrus developed well in Arizona.

VEGETABLES: In Florida, land preparation was active and planting gained momentum. Limited supplies of summer vegetables were available from northern and Panhandle areas. Fall planting and land preparation continued in the Rio Grande Valley and San Antonio-Winter Garden areas. Some early seeded fields emerged in the Rio Grande

(Continued to back cover)

## State Summaries of Weather and Agriculture

These summaries provide brief descriptions of crop and weather conditions important on a national scale. More detailed data are available in Weather and Crop Bulletins published each Monday by NASS State Statistical Offices in cooperation with the National Weather Service.

ALABAMA: Scattered showers, thunderstorms common. Most locations received some rain, several reporting over 1.00 in. Temperatures averaged 2 to 4° above normal north, 1 to 2° below normal extreme southwest.

Days suitable for fieldwork 5.5. Soil moisture 6% very short, 50% short, 39% adequate, 5% surplus. Hot, dry conditions persisted with only occasional showers providing limited moisture. Soybeans 57% blooming, 61% 1987, 63% avg.; 30% setting pods, 31% 1987, 34% avg.; 7% turning color, 5% 1987; 15% poor, 35% fair, 38% good, 12% excellent. Corn 81% dented, 90% 1987, 86% avg.; 66% mature, 71% 1987, 61% avg.; 30% harvested, 22% 1987, 18% avg.; 21% very poor, 25% poor, 46% fair, 8% good. Cotton 97% setting bolls, 99% 1987, 93% avg.; 5% bolls opened, 4% 1987, 2% avg.; 11% very poor, 32% poor, 38% fair, 14% good, 5% excellent. Sorghum 6% harvested, 8% 1987, 3% avg.; 13% poor, 42% fair, 45% good. Peanuts 1% fair, 99% good. Hay, roughage supplies 16% very short, 74% short, 10% adequate. Pasture feed supplies 6% very short, 36% short, 58% adequate. Livestock, pastures mostly good to fair. Primary activities: Harvesting corn, sorghum, vegetables, peaches, hay; controlling weeds, insects in row crops; planting fall vegetables; applying fungicides to peanuts; building fish ponds, marketing catfish; general care of livestock, poultry.

ALASKA: Generally cooler with rain showers, 1 to 3 days sunshine. Temperature highs ranged from 3° below normal to 1° above normal. Lows ranged from normal to 5° warmer than normal. Seasonal precipitation totals from 1.62in. drier than normal to 4.42 in. wetter than normal.

Days suitable for baling hay 2.0. Topsoil moisture 18% short 78% adequate, 4% surplus. Most first crop hay cut. Second crop hay mostly good. Over 20% barley for grain turning color. Most commercial potatoes acreage blooming with good or better condition for this time of year. Commercial vegetables harvest continued.

ARIZONA: Monsoon weather continued, except the southwest, 31st. Heavy rains, small hail, strong winds central, 1st. Showers, thunderstorms north, east 2nd. Lower temperatures 3rd. Heavy rainfall southeast, south central sections, wind gusts 54 mph 4th. Heavy rain Mogollon Rim, White Mountains 5th. Rainfall for period between 0.25 to 2.00 in. Average temperatures 4° below normal to 1° above.

Cotton advanced well; 97% setting bolls, 25% open; 80% good, 20% excellent. Insect damage moderate central, east; light west. Irrigation, lay-by herbicide application continued. Alfalfa crop rated fair to good. Insect, weed levels light to moderate. Hay, roughage supplies 83% adequate, 17% surplus. New crop citrus fruits continued to develop. Groves rated good. Preparation of fields for fall vegetables, west. Cantaloup, honeydew, watermelon harvest continued central. Apple harvest, packing underway east.

ARKANSAS: Hot, humid week with temperatures above normal. Spotty showers with light amounts of rainfall except isolated heavy showers. Temperature extremes 65°; 104°. Rainfall totals none to 2.49 in.

Days suitable for fieldwork 7.0. Soil moisture 66% short, 33% adequate, 1% surplus. Main farming activities: cutting hay; applying fertilizers and pesticides; cultivating crops; harvesting fruits and vegetables. Continued problems with insects, diseases, and weeds in crops. Corn 12% poor, 43% fair, 34% good, 11% excellent. Hay and roughage supplies 14% very short, 75% short, 11% adequate. Pasture, range 3% very poor, 35% poor, 43% fair, 19% good. Stockwater supplies 39% short, 61% adequate. Livestock good, problems with external parasites. Bermudagrass hay cut many areas.

CALIFORNIA: Weather dry for most areas. Temperatures began above normal cooled to near normal by 2nd.

Open weather aided development growth crops. Cotton progressed well. Fields continued drop squares, bolls heat stress. Rice good progress. Wild rice harvest underway. Dry bean, alfalfa seed harvests active, field corn normal growth. Sugarbeets, alfalfa hay harvests continued. Apple, Hass avocado harvest continued. Table grape harvest active. Wine type grape harvest started. Nectarine harvest continues. Peach harvest active. Plum harvest continued. Prune harvest started. Asian pear and Bartlett pear harvests full swing. Lemon and Valencia orange harvest continued. Almond orchards preparing for harvest, hulls splitting. Walnut orchards treated for codling moth. Artichokes light, good quality Salinas. Broccoli moderate, good quality Salinas, Santa Maria. Cauliflower moderate Salinas somewhat lighter Santa Maria. Quality good both areas. Salinas carrots heavy, good quality, celery moderate, good quality. Carrot harvest very active Westside. Lettuce moderate to heavy, variable to good Salinas, Santa Maria, respectively. Harvest all types melons continued heavy Merced-Atwater, Sacramento Valley, Westside, Riverside. Potatoes good growth north, summer harvest continued south. Strawberry supplies seasonally decreased central coast. Processing tomato harvest continued Sacramento Valley, Westside. Some losses due to mold, sunburn, rot. Tomatoes harvested Merced-Atwater. Livestock fair to good condition. Dry weather depleted water supplies irrigated pastures northern counties. Most cattle moved summer ranges, remaining cattle on irrigated pasture. Hay, roughage supplies mostly adequate, short few areas. Supplemental feeding continued. Stock ponds very low. Hay, roughage supplies 85 percent adequate, 15 percent short.

COLORADO: Hot, dry weather over mountains, western Valleys; substantial rains over the eastern Plains. Precipitation ranged from 0.05 to 5.26 in. Average temperature range 3 to 5° below normal.

Days suitable for fieldwork, 5.5. Soil moisture 9% very short, 43% short, 46% adequate, 2% surplus. Hay and roughage supplies 9% short, 89% adequate, 2% surplus. Barley harvested, 41%. Spring wheat harvest 7%. Oat harvest at 30%. Rain slowed progress on eastern plains. Livestock, pastures mostly good to excellent.

FLORIDA: Typical summertime weather continued. Scattered showers, thunderstorms spread variable amounts rain. Temperatures near normal.

Soil moisture generally adequate except scattered areas, northern Peninsula remained short. Cotton, peanuts, soybeans responded well to improved moisture. Armyworms problem some cotton fields. Growers began harvest high moisture corn. Tobacco harvest 75% complete. Haymaking active. Sugarcane made good growth. Pasture, forage supplies improved statewide; good to excellent most areas

except fair in Panhandle. Hay, roughage supplies 31% short, 69% adequate. Cattle fair to excellent, generally mostly good. Very good grove condition, soil moisture adequate, variable rainfall, lots of new foliage, new crop fruit good fruit sizes vary some blocks, caretakers very active all areas. Typical summer weather continued vegetable producing areas. Land preparation active; planting gaining momentum. Limited supply summer vegetables northern, Panhandle areas.

GEORGIA: Scattered thunderstorms each day. Several stations 1.00 in. or more north, local totals 3.00 in. Central, south less than 0.50 in. Temperatures 1 to 3° above normal. Highs mid and upper 90s, several stations 99°. Coolest low and mid 60s mountains, low 70s coast.

Days suitable for fieldwork 5.6. Soil moisture 12% very short, 62% short, 26% adequate. Corn 9% harvested, week behind average. Beet armyworms and aphids in cotton fields, some dropping fruit. Peanuts fair to good; 98% pegging, 100% 1987, 99% avg. Soybeans varied, responding to improved moisture. Tobacco mostly fair, 54% harvested, week behind average. Apples mostly good. Pecans fair to good, aphids increased. Pasture, hay fair. Hay supplies 25% very short, 63% short, 12% adequate. Cattle, hogs fair to good.

HAWAII: Warm, humid early week. Tropical Depression Gilma brought heavy rains to windward areas at midweek. Mostly sunny, humid conditions followed. Tropical Depression Fabio passed south of State over weekend. Locally heavy rains gusty winds in windward areas of southern islands. No major agricultural damage expected to result from either Tropical Depression. Rains helped replenish resevoirs, revive pastures. Daily temperatures mid 70s to low 90s. Rainfall none to 12.66 in. Variable winds 5 to 25 mph.

Days suitable for fieldwork 7.0. Disease infestations expected to increase in coming weeks. Chinese cabbage production moderate. Head cabbage good, output moderate. Cucumber production moderate. Snap bean production light, increase expected in coming weeks. Papaya harvesting active. Banana production of Cavendish varieties heavy. Tomato production light. Watermelon production above year ago. Pastures improved condition due to rains.

IDAHO: Temperatures slightly below normal statewide. Precipitation in isolated locations; otherwise below normal.

Days suitable for fieldwork 7.0. Soil moisture 27% very short, 31% short, 42% adequate. Irrigation water supplies good. Virtually all potato acreage closing middles, 8% turning; good condition despite heat stress. Spring wheat 25% harvested, 19% 1987, 9% avg. Winter wheat 40% harvested, 19% 1987, 28% avg. Spring barley 27% harvested. Oats 30% harvested. Second cutting of alfalfa 72% harvested. Dry peas 22% harvested. Lentils 7% harvested. Peaches 37% harvested. Mint over 70% harvested. Range, pasture fair. Livestock good. Hay, roughage supply 28% short, 68% adequate, 4% surplus.

ILLINOIS: Temperature highs averaged 3 to 8° above normal central and south, 9 to 11° above normal north. Temperature lows averaged 2 to 8° above normal.
Precipitation averaged 0.25 to 0.75 in., except Iuka with 1.41 in.

Days suitable for fieldwork 6.80. Soil moisture 88% short, 12% adequate. Alfalfa 3rd crop cut 45%, 47% 1987, 35% avg; 10% very poor, 31% poor, 52% fair, 7% good. Hay and roughage supplies 16% very short, 66% short, 18% adequate. Pasture 52% very poor, 24% poor, 23% fair, 1% good.

INDIANA: Temperatures 3 to 5° above normal south and 12° above normal northern area. Lows 50 to lower 60s, highs mid to upper 90s central and southern areas, 100s in north. Precipitation varied. Totals less than 0.25 in. to 3.00 in.

Days suitable for fieldwork 6.1. Topsoil moisture 67% short, 33% adequate. Subsoil moisture 94% short, 6% adequate. Pastures improved. Oats 93% combined, 100 % 1987, 91% avg. Alfalfa 95% cut twice, 97% 1987, 94% avg. Pastures 19% very poor, 45% poor, 34% fair, 2% good. Hay, roughage for feeding season 10% very short, 69% short, 21% adequate. Livestock water supply 5% very short, 19% short, 76% adequate. Hot weather during week with late period showers some areas.

IOWA: Temperatures 5 to 9° about normal; extremes 49 to 104°. Precipitation 0 to over 5 in.; average 0.8 in.

Days suitable for fieldwork 6.6. Topsoil moisture 97% short, 3% adequate; subsoil moisture 98% short, 2% adequate. Hay 32% very poor, 42% poor, 23% fair, 3% good. Third crop alfalfa 12% harvested, 16% 1987, 8% avg. Second crop clover 90% harvested, 76% 1987, 76% avg. Hay availability for feed 7% very short, 26% short, 61% adequate, 6% surplus. Hay being fed to supplement pastures 1% none, 14% light, 46% moderate, 39% heavy. Corn 85% milk stage, 91% 1987, 65% avg. Livestock under heat stress. Some losses in confined hogs. Weight gains slow. Water for livestock a continuing problem. Pastures 73% very poor, 21% poor, 5% fair, 1% good.

KANSAS: Temperatures ranged 80° northwest to mid 80s eastern two-thirds; 7° above normal northeast, 2° above normal southwest. Precipitation scattered; more than 1.00 in. received northwest, south central and southeast. 0.50 in. elsewhere. Isolated heavier amounts above 2.00 in.

Days suitable for fieldwork 6.0. Topsoil moisture 73% short, 27% adequate. Subsoil moisture 61% short, 39% adequate, both decreased from last week. European, southwestern corn borers present light to heavy southwest, south central. Greenbugs increasing some areas, sorghum treatment in these areas. Beneficial insects controlling greenbugs elsewhere. Soybean fields weedy, herbicide little effect due to dry weather. Hay and roughage supplies 6% very short, 44% short, 50% adequate. Pasture generally poor western two-thirds, fair eastern third. Third cutting alfalfa approximately 70% complete. Activity included working wheat stubble, applying fertilizer to wheat ground and irrigation.

KENTUCKY: Hot, humid with several periods thunderstorms. Rainfall varied widely, totals 0.33 to over 4.00 in.; average 0.80 to 1.20 in. Temperatures averaged 3 to 6° above normal; highs mostly 90s, lows around 70°.

Days suitable fieldwork 5.4. Soil moisture 13% very short, 60% short, 27% adequate. General overall improvement in crop conditions. Burley 60% blooming or beyond, 20% plants topped, 58% topped 1987, 43% average. Tobacco 1% very poor, 7% poor, 44% fair, 48% good. Dark tobacco 70% blooming or beyond. Pastures showing improvement but still generally short. Pastures 17% very short, 36% short, 40% fair, 7% good. Hay and roughage supplies 26% very short, 66% short, 8% adequate.

LOUISIANA: Temperatures 1° below to 2° above normal. Temperature extremes 67°; 102°. Rainfall averaged 0.02 to 1.68 in.

Days suitable for fieldwork 5.4. Soil moisture 3% very short, 29% short, 59% adequate, 9% surplus. Corn fair; 100% dough stage; 62% mature; 9% harvested. Sorghum 7% ripe. Harvest underway in

southwest. Sweetpotatoes fair to good; 5% harvested. Peaches 98% harvested. Hay, roughage supplies 17% very short, 46% short, 37% adequate. Livestock feed obtained from pastures 89%. Sugarcane good. Livestock, pastures, pecans fair to good. Vegetables fair. Spraying fungicides on soybeans, rice. Main activities: Fertilizing pastures, hay; harvesting hay, peaches, corn, rice, sweetpotatoes; cultivating, spraying soybeans.

MARYLAND & DELAWARE: Maryland: Precipitation averaged 0.15 in. Average temperature 81.8°, normal 76.1°. Temperature extremes 99°; 59°.

Days suitable for fieldwork 6.3. Topsoil moisture 40% short, 60% adequate. Subsoil moisture 70% short, 30% adequate. Pasture fair. Current hay supply 30% short, 70% adequate. Corn 20% poor, 80% fair. Corn silked 90%, 90% avg. Corn dough 30%, 50% avg. Soybeans 50% fair, 50% good. Soybeans bloomed 50%, 50% avg. Soybeans podded 15%, 25% avg. Tobacco 30% fair, 70% good. Tobacco bloomed 60%, 60% avg. Alfalfa third cutting 50%, 45% avg. Apples, peaches 20% fair, 80% good. Peaches harvested 25%, 50% avg.

Delaware: Precipitation averaged 0.17 in. Average temperature 81°, normal 77°. Temperature extremes 70°; 100°.

Days suitable for fieldwork 6.5. Topsoil moisture 20% short, 80% adequate. Subsoil moisture 40% short, 60% adequate. Pasture fair. Current hay supply 40% short, 60% adequate. Corn 50% poor, 50% fair. Corn silked 95%, 90% avg. Corn dough 15%, 45% avg. Soybeans good. Soybeans bloomed 30%, 50% avg. Soybeans podded 10%, 25% avg. Alfalfa third cutting 55%, 70% avg. Apples, peaches good. Peaches harvested 45%, 45% avg.

MICHIGAN: Temperatures ranged 7 to 13° above normal. Temperature extremes 48°; 102°. Precipitation ranged from none to 4.02 in. across State.

Days suitable for fieldwork 6.0. Soil moisture 85% short, 15% adequate. Corn 85% silked, 97% 1987, 85% avg.; dough 2%, 45% 1987, 20% avg.; none dent, none 1987, 2% avg.; 20% very poor, 28% poor, 35% fair, 15% good, 2% excellent. Soybeans 85% bloomed, 96% 1987, 85% avg.; setting pods 35%, 60% 1987, 35% avg;, 10% very poor, 15% poor, 35% fair, 35% good, 5% excellent. Wheat 100% harvested, 100% 1987, 95% avg. Dry beans 70% bloomed, 95% 1987, 85% avg; setting pods 20%, 55% 1987, 30% avg.;8% very poor, 17% poor, 40% fair, 30% good, 5% excellent. Pastures supplying 20% of livestock feed supply. Hay and roughage supplies 40% very short, 55% short, 5% adequate. Major activities: Oats and barley harvest, cutting hay, apple and peach picking, vegetable harvest.

MINNESOTA: Temperatures averaged 3 to 10° above normal. Temperature extremes 47°; 108°. Precipitation averaged 0.43 to 2.82 in. Greatest weekly total 3.50 in.

Days suitable for fieldwork 5.4. Topsoil moisture 49% very short, 38% short 13% adequate. Spring wheat 63% combined, 58% 1987, 24% avg. Oats 89% combined, 84% 1987, 54% avg. Barley 82% combined, 80% 1987, 47% avg. Corn 88% in milk, 92% 1987, 51% avg.; 31% in dough, 50% 1987 14% avg. Soybeans 94% setting pods, 91% 1987, 61% avg. Sweet Corn 34% harvested for processing, 38% 1987, 18% avg. Soybeans 23% very poor, 39% poor, 34% fair, 4% good, 0% excellent. Field Corn 34% very poor, 40% poor, 26% fair. Spring wheat 37% very poor, 27% poor, 36% fair. Sugarbeets 20% very poor, 40% poor, 35% fair, 5% good. Hay supplies remainder of feeding season 37% very short, 44% short, 18% adequate, 1% surplus. Livestock feed now obtained from pastures 22%.

MISSISSIPPI: Temperatures normal south, 3 to 4° above normal. South benefited from stationary low pressure receiving around 2.00 in. of precipitation, north received only scattered showers.

Days suitable for fieldwork 5.9, 5.3 1987, 4.9 avg. Soil moisture 5% very short, 50% short, 40% adequate, 5% surplus. Corn fair; 80% dough stage, 97% 1987, 93% avg.; 18% mature, 34% 1987, 40% avg. Sorghum fair; 87% heading, 95% 1987, 86% avg. Cotton fair to good; 95% setting bolls, 100% 1987, 88% avg.; 2% open bolls, 1% 1987, none avg. Rice fair to good; 40% heading, 76% 1987, 64% avg. Soybeans poor to fair; 48% blooming, 64% 1987, 65% avg.; 25% podding, 29% 1987, 27% avg. Peaches 85% harvested, 99% in 1987, 90% avg. Pasture mostly fair. Livestock fair to good. Watermelons 60% harvested, 81% 1987, 68% avg. Corn silage 38% harvested, 46% 1987, 41% avg. Sorghum silage 30% harvested, 28% 1987, 32% avg. Hay 62% harvested, 73% 1987, 69% avg. Sweetpotatoes 5% harvested, 3% 1987, 2% avg. Hay supply 10% very short, 65% short, 25% adequate. Continued scattered showers. Activities: Turning hay, weed and insect control.

MISSOURI: Temperatures 1 to 8° above normal, some readings over 100°, warmest northeast. Showers scattered, mostly less than 0.50 in.

Days suitable for fieldwork 6.3. Topsoil moisture 82% short, 17% adequate, 1% surplus, northern third all short. Drought hindering crop development, soybeans need rain to fill pods. Hot, dry winds hurt crops northwest. Alfalfa 3rd cutting 65%, 81% 1987, 55% avg. Livestock feed from pasture 58%. Supply of hay, roughage 30% very short, 63% short, 7% adequate. Stock water supplies 23% critically short, 55% short, 22% adequate. Pastures 40% very poor, 26% poor, 26% fair, 8% good.

MONTANA: Temperatures normal to 5° above normal northeast, southeast and south central. Elsewhere normal to 2° below normal. Scattered light showers.

Days suitable for fieldwork 6.8. Topsoil moisture 96% short, 4% adequate. Subsoil moisture 93% short, 7% adequate. Spring wheat 42% very poor, 34% poor, 20% fair, 4% good. Barley 32% very poor, 33% poor, 23% fair, 10% good, 2% excellent. Oats 45% very poor, 28% poor, 17% fair, 9% good, 1% excellent. Range, pasture feed 57% very poor, 26% poor, 13% fair, 4% good. Barley 40% harvested, 2% 1987, 9% avg. Oats 44% harvested, 4% 1987, 11% avg. Hay, roughage supplies 39% very short, 42% short, 19% adequate. Second cutting alfalfa 59% harvested, 32% 1987, 35% avg. Other hay 81% harvested, 76% 1987, 79% avg.

NEBRASKA: Heat once again predominant for State as temperatures ranged 5° above east to about normal rest of State. Precipitation received midweek many areas. Extremes: 45°; 104°.

Days suitable for fieldwork 5.7. Topsoil moisture 55% short, 45% adequate. Subsoil moisture 59% short, 41% adequate. Alfalfa hay 2% very poor, 14% poor, 56% fair, 28% good. Alfalfa hay 3rd cutting 40%, 38% 1987, 17% avg. Pasture, range feed supplies 10% very short, 39% short, 51% adequate. Hay, roughage supplies 3% very short, 17% short, 80% adequate.

NEVADA: High pressure system generally dominated. Upper trough brushed through north portions midweek lowering temperatures slightly but produced no significant precipitation. More precipitation end of week mainly eastern sections. Despite high pressure system--clouds, showers held temperatures to near or slightly below normal east, south ; north about 4° above normal. Temperature extremes 29°; 105°.

Small grain harvesting, haying operations favored by hot, dry weather. Ranges high elevation areas not furnishing much forage. Cattle beginning to

drift down to lower elevation ranges already, early for this movement. Hay roughage supplies 36% short, 57% adequate, 7% surplus.

NEW ENGLAND: Precipitation averaged 1.50 to 2.50 in. northern Maine and northern New Hampshire, 0.50 to 0.75 in. remainder north, less than 0.25 in. south. Average temperatures from mid 70s near Canadian border to 80° southern coast. Temperatures above normal.

Days suitable for fieldwork 6.0. Fieldwork 2.0 days behind. Soil moisture 5% very short, 5% short, 85% adequate, 5% surplus. Grazing availability 6% very short, 11% short, 83% adequate. Hay and roughage 38% short, 56% adequate, 6% surplus. Percent of feed now being obtained from pastures 38%. Maine potatoes good. Connecticut River Valley potatoes fair to good. Field corn good. Sweet corn 30% harvested, 25% 1987, 25% avg.; condition good. Shade tobacco 40% harvested; condition good. Outdoor tobacco 20% cut; condition good. First crop hay 100% harvested. Second crop hay 50% cut, 55% 1987, 50% avg.; condition fair to good. Third crop hay 5% cut, 10% 1987, 5% avg.; condition fair to good. Apples good; size medium. Peaches good; harvest beginning Massachusetts. Blueberries 40% picked. Major farm activities: Haying, harvesting vegetables, picking blueberries, insect control.

NEW JERSEY: Temperatures averaged much above normal. Extremes 58°; 97°. Rainfall averaged none north, 0.02 in. central, 0.03 in. south. Heaviest 24-hour total 0.12 in. on 5th, 6th. Estimated soil moisture percent field capacity averaged 73% north, 45% central, 41% south. Four inch soil temperatures averaged 77° north, 79° central, 80° south.

Fieldwork very active; 7 days suitable. Hot windy weather drying topsoils. Fall vegetable planting active. Summer vegetables in moderate supply. Irish potato harvest remained light. Field corn, soybeans could use a good soaking rain most areas. Hay making active. Hay and roughage supplies 50% adequate, 50% short.

NEW MEXICO: Temperatures slightly below normal over State. Precipitation recorded statewide ranging from 0.10 in. at Roswell to 3.79 in. at Deming.

Days suitable for fieldwork 5.7. Soil moisture 25% short, 75% adequate. Cotton 100% squaring; 90% setting bolls; 49% fair, 38% good, 13% excellent. Onions 20% fair, 80% good; shipments steady. Cattle 23% fair, 77% good. Sheep 11% fair, 89% good. Range 31% fair, 61% good, 8% excellent. Alfalfa condition 8% poor, 25% fair, 59% good, 8% excellent. Hay and roughage stocks supplies 40% short, 60% adequate.

NEW YORK: Temperatures averaged 10° above normal. Highs 90s almost all week. For most areas fairly dry week. However, places that got rain got a bundle one shot from scattered thunderstorms.

Days suitable for fieldwork 6.3. Soil moisture mostly adequate. Pastures fair. Hay, corn fair to good. Wheat 80% harvested, 85 percent 1987. Oats 22 percent harvested, 35 percent 1987. Second cutting alfalfa 58 percent complete, slightly above average. Hay and roughage supplies judged 50 percent short, 50 percent adequate. Locally grown vegetables appearing at markets. Early onion harvest underway in Orange County. Early beet harvest started. Fresh market cabbage harvest continued. Grapes in Finger Lakes region in good to excellent condition. Hudson Valley apples in fair to good.

NORTH CAROLINA: Temperatures averaged 2° to 4° above normal statewide. Temperature extremes 58°; 97°. Precipitation none to 3.89 in. across State.

Days suitable for fieldwork 5.6. Soil moisture 5% very short, 33% short, 58% adequate, 4% surplus. Pasture 4% very poor, 13% poor, 42% fair, 37% good, 4% excellent. Flue-cured tobacco 26% harvested, 22% 1987, 22% avg. Tobacco 1% very poor, 1% poor, 16% fair, 70% good, 12% excellent. Peanuts 3% poor, 8% fair, 79% good, 10% excellent. Sweet potato 2% poor, 9% fair, 83% good, 6% excellent. Irish potatoes 95% harvested, 96% 1987, 98% avg. Peaches 74% harvested, 76% 1987, 82% avg.; 18% fair, 70% good, 12% excellent. Truck crops 6% poor, 30% fair, 63% good, 1% excellent. Hay and roughage supply 19% short, 78% adequate, 3% surplus. Condition 3% very poor, 11% poor, 42% fair, 40% good, 4% excellent. Livestock feed obtained from pasture 67%. Apples 6% poor, 50% fair, 44% good. Major farm activities: Tobacco topping, suckering, harvesting; cultivating soybeans, cotton, peanuts; harvest peaches, truck crops, hay, Irish potatoes, corn silage; clipping pastures; apply insecticides; shearing Christmas trees; land preparation for fall planting; tending livestock and general farm maintenance.

NORTH DAKOTA: Cool early, warm late. Temperatures averaged 2 to 3° above normal. Extremes 45°; 107°. Scattered, variable precipitation averaged 0.03 to 1.45 in. Heaviest southeast, east central.

Days suitable for fieldwork 6.5. Topsoil 73% very short. 24% short, 3% adequate. Subsoil moisture further depleted; 74% very short, 20% short, 6% adequate. Small grain harvest about 3 weeks ahead of normal pace. Spring wheat 78% combined, 20% 1987, 13% avg.; durum 52%, 8% 1987, 6% avg.; oats 81%, 25% 1987, 23% avg.; barley 84%, 41% 1987, 34% avg. Row crops continued to deteriorate. Corn for grain 23% very poor, 56% poor, 12% fair, 9% good; corn for silage 36%, 55%, 7%, 2%; sunflower 20%, 16%, 54%, 10%; dry edible beans 6%, 32%, 37%, 25%; soybeans 12%, 35%, 25%, 28%; potatoes none, 74%, 23%, 3%, flax 30%, 35%, 32%, 3%. Row crops progressed ahead of average development. Sunflower 10% flowers dried and beyond, 2% 1987, 1% avg.; corn for grain 61% milk to dough and beyond, 44% 1987, 33% avg.; potatoes 84% rows filled and beyond, 97% 1987, 69% avg.; dry edible beans 69% fully podded, 40% 1987, 41% avg.; soybeans 9% lower leaves yellowing, 2% 1987, 3% avg.; flax 67% turning to ripe and beyond, 34% 1987, 31% avg. Hay and roughage supplies 41% very short, 37% short, 22% adequate. Pastures 97% short to very short, 2% fair, 1% good; furnished 68% roughage requirements.

OHIO: Average high temperatures high 80s to low 90s. Average low temperatures high 60s to 70s. Higher temperature at beginning of week; lower temperatures latter half of week. Rain highly variable from a trace to 1.25 in. Line northeast to southwest benefited most. Northwest, southeast very dry.

Days suitable for fieldwork 6.4. Soil moisture 68% short, 32% adequate. Crop conditions improved slightly. Corn suffering from root worm, poor. Soybeans overtaken by velvetleaf weeds; spider mites advanced further into fields. Soybeans fair to poor. Oat harvest neared completion. Harvesting processing tomatoes, potatoes, corn silage, summer apples, cucumbers for pickles continued. Hay, pasture improved slightly; both poor. Hay, roughage supplies 35% very short, 46% short, 18% adequate, 1% surplus.

OKLAHOMA: Temperatures averaged 1° above normal southwest to 4° above normal northeast. Precipitation averaged none east, central, southeast to 1.97 in. south central.

Days suitable for fieldwork 6.5. Topsoil moisture 85% short, 15% adequate. Cotton 100% good; 100% squaring, 85% 1987, 85% avg.; 70% setting bolls, 50% 1987, 40% avg. Hot weather promoted growth. Sorghum 30 % fair, 70% good; 50%

heading, 60% 1987, 45% avg.; 25% coloring, 25% 1987, 15% avg. Peanuts 90% pegging, 90% 1987, 85% avg. Soybeans 40% flowering, 75% 1987, 55% avg. Corn 60% milk-to-soft, 85% 1987, 80% avg. Pastures fair. Supplemental feed comprised 15% of livestock feed. Hay, forage supplies 10% very short, 37% short, 53% adequate. Cattle good. Marketings average, prices up slightly from previous week.

OREGON: Temperatures 4° above normal to a few degrees below normal. Cool nights some eastern locations accounted for below normal averages. Brookings 108° on 4th. Measurable precipitation, limited to east. Most rainfall 0.26 in. Enterprise, 0.17 in. Burns. Some other south central,northeastern locations nearly 0.10 in.

Soil moisture 45% short, 55% adequate. Winter wheat 90% good, 10% excellent. Barley 59% harvested, 60% 1987, 63% avg. Hay, roughage supplies 32% short, 54% adequate, 14% surplus. Grass seed harvest neared completion west, Union County. Mint harvest started Willamette Valley. Second hay cutting Klamath Basin, north central, northeast; third cutting Hermiston-Boardman, southwest. Tart cherry harvest neared completion Willamette Valley. Sweet cherry harvest neared end Union County. Marionberry, Boysenberry, Red raspberry picking about completed; Evergreen blackberry harvest started Willamette Valley. Blueberry harvest 70% completed Willamette Valley. Early prunes harvested Milton-Freewater. Filberts sprayed for worms west. Post harvest strawberry fieldwork begun, some replanting underway Willamette Valley. Harvest of cucumbers, snap beans, broccoli, squash continued Willamette Valley. Snap beans yields good, harvest continued Milton-Freewater. Sweet corn harvest Jackson County, Malheur County. Early potato harvest underway Hermiston-Boardman, Malheur; crop sizing nicely Klamath. Watermelon harvest in full swing Hermiston area, good quality. Early onions harvested Hermiston-Boardman, crop bulbing rapidly southwest. Irrigation water may be short this fall central areas, Malheur County. Livestock mostly good. Range, pasture poor to fair east, southwest; fair to good Willamette Valley, coast. Stockwater supplies dropping ahead of normal southeast.

PENNSYLVANIA: Hot, dusty week. Bermuda high blocked all weather systems. Few showers reached west central areas. Average temperature 78°, 7° above normal. Temperature extremes 51°; 101°. Average precipitation 0.46 in., 0.40 in. below normal.

Days suitable for fieldwork 6.0. Soil moisture 63% short, 35% adequate, 2% surplus. Corn 60% silk, 86% 1987, 70% avg.; 5% dough, 30% 1987, 15% avg. Ensilage corn harvest 3% complete, 3% 1987. Corn 17% very poor, 32% poor, 34% fair, 14% good, 3% excellent. Soybean 6% very poor, 21% poor, 37% fair, 31% good, 5% excellent. Wheat harvest 92% complete, 92% 1987. Oat harvest 65% complete, 71% 1987. Barley harvest 96% complete, 100% 1987. Potato harvest 4% complete, 10% 1987. Second cutting alfalfa 79% complete, 81% 1987. Third cutting alfalfa 24% complete, 29% 1987. Second cutting clover-timothy 52% complete, 55% 1987. Hay and roughage supplies 18% very short, 62% short, 20% adequate. 18% of livestock feed now obtained from pastures. Quality of hay made fair to good. Feed from pastures mostly below average. Apple harvest 7% complete, 8% 1987. Peach harvest 20% complete, 40% 1987. Fall plowing 9% complete, 8% 1987. Activities for the week: Harvesting oats, barley, wheat, hay, haylage, vegetables, fruit, potatoes; controlling weeds; caring for livestock; maintaining machinery.

SOUTH CAROLINA: Daily average temperatures 2 to 4° above normal. Rainfall less than 0.25 in. to 4.42 in.

Days suitable for fieldwork 5.1. Soil moisture 6% very short, 68% short, 26% adequate. Cotton 94% squaring, 100% 1987, 100% avg.; 70% setting bolls, 89% 1987, 92% avg.; 4% poor, 23% fair, 73% good. Soybeans 48% blooming, 49% 1987, 44% avg.; 12% setting pods, 25% 1987, 17% avg.; 8% poor, 38% fair, 54% good. Tobacco fair to good; 42% harvested, 44% 1987, 44% avg. Corn 87% dough stage, 95% 1987, 89% avg; 31% mature, 53% 1987, 49% avg.; 3% harvested, 4% 1987, 7% avg.; fair. Peanuts fair to good. Sorghum fair; 7% harvested, 11% 1987, 8% avg. Peaches fair to good; 80% harvested, 79% 1987, 84% avg. Pastures fair. Livestock fair to good. Hay and roughage supplies, 20% very short, 69% short, 11% adequate.

SOUTH DAKOTA: Average temperatures normal to 7° above normal. Extremes 48°; 108°. Widespread rainfall except for amounts below 0.50 in. northwest corner,a couple isolated spots south central. Majority of places south, east received over 1.00 in. Some amounts over 2.00 in., especially northeast.

Days suitable for fieldwork 2.9. Topsoil moisture 25% critically short, 36% short, 37% adequate, 2% surplus. Hay and roughage supplies 23% very short, 47% short, 29% adequate, 1% surplus. Seventy-nine percent of livestock feed is being obtained from pastures. Much of the corn too far gone to benefit from rain, moisture received should help soybean and sorghum crops considerably.

TENNESSEE: Temperatures above normal. Precipitation normal.

Days suitable for fieldwork 5.0. Soil moisture 4% very short, 47% short, 48% adequate, 1% surplus. Corn 64% dough, 84% 1987, 67% avg.; 27% dent, 54% 1987, 33% avg.; 9% very poor, 31% poor, 51% fair, 8% good, 1% excellent. Hay, roughage supplies 17% very short, 75% short, 8% adequate. Tobacco 25% topped, 65% 1987; 2% very poor, 10% poor, 57% fair, 31% good. Crops improved. Pastures and cattle improved.

TEXAS: Enough moisture, instability over central, eastern sections early last week, daytime heating triggered mostly widely scattered thunderstorms afternoon, evening. Widely scattered thunderstorms returned east because tropical depression off Louisiana coast. Below normal precipitation much of State. Above Trans-Pecos, north central. Cloudiness kept temperature close to or below normal. Temperatures warmer than normal northern Blacklands.

Crops: Corn harvest wind down Coastal Bend; showers slowed progress. Harvest progressing well Upper Coast between showers. Harvest increased central, east, Blacklands. Yields fair to good. Fields rapidly enter dent stage Plains with hot temperatures. Fields excellent progress under steady irrigation. Corn mature 63%, 56% 1987, 56% 3-year avg. Harvested 33%, 14% 1987, 23% avg. Grain sorghum harvest winding down central, some fields remaining because rain delays. Yields fair to good. Harvest increased Blacklands. Yields better than expected, many areas received timely rains. Fields rapidly turning color Cross Timbers, Low Plains. Fields continued head High Plains, steady irrigation necessary to hold condition. Some spraying for midge occurred. Sorghum mature 50%, 47% 1987, 51% avg. Harvested 45%, 33% 1987, 41% avg. Cotton harvest continued Valley, Coastal Bend as weather allowed. Fields Upper Coast, some south being defoliated. Bolls opening central, Blacklands last week. Insects continued cause problems many fields Cross Timbers, Plains. Spraying increased. Plants continued set bolls;

overall progress slightly behind. Irrigation steady. Plants setting bolls Trans-Pecos, progress behind. Cotton squaring 99%, 99% 1987, 96% avg. Harvested 6%, 2% 1987, 3% avg. Rice harvest good progress Upper Coast. Early yields good. Other fields continued turn color. Rice harvested 15%, 10% 1987, 22% avg. Peanuts continued good growth, progress across much state. Many dryland fields Cross Timbers, central could use good rain. Few fields some stress. Disease problems remained light. Irrigation steady. Soybean harvest beginning some early varieties Upper Coast. Recent showers help later beans. High Plains, irrigation steady for continued good progress. Growth good. Scattered fields light hail damage. Sugarbeets showed very good progress under heavy irrigation.

Commercial Vegetables: Rio Grande Valley planting operations continued, some early fields emerging. Spraying operations continued, citrus groves good, sizing occurring. San Antonio-Winter Garden planting, land preparation continued. East Texas melon yields continued low. Sweetpotato progress improve with scattered showers. High Plains onion, potato, cucumber harvest continued. Quality suffered little early fields. Prices onions low. Trans-Pecos cantaloup harvest continued as onion harvest drawing to close. Tomato harvest should begin soon. Harvest chilies continued. Pecans signs of lack of moisture some areas additional drop occurred. Rain would help central areas, Blacklands. Aphid problems increasing, spraying underway.

Range and Pasture: Additional scattered showers south, east have helped grasses show little improvement. Many pastures Hill Country look good for this time of year. Second hay cuttings also underway as growth improved. Additional rain needed many areas for continued progress. Livestock conditions holding steady. Hay supplies increasing with overall supplies 14% very short; 37% short; 44% adequate; 5% surplus.

UTAH: Temperatures 1 to 4° above normal except 1 below south. Precipitation throughout State, very heavy southern region.

Days suitable fieldwork 6.5. Soil moisture 57% short, 43% adequate. Winter wheat 86% harvested, 80% 1987, 59% avg. Spring wheat 73% harvested, 48% 1987, 29% avg. Barley 76% harvested, 53% 1987, 44% avg. Oats 74% ripe, 64% 1987, 42% avg.; 28% harvested for grain, 18% 1987, 15% avg. Corn height 79 in., 73 in. 1987, 70 in. avg.; 90% tasseled, 78% 1987, 64% avg. Alfalfa 2nd cutting 90% complete, 77% 1987, 71% avg. Pasture and range 7% very poor, 43% poor, 33% fair, 17% good. Irrigation water supply 16% very short, 42% short, 42% adequate. Stock water supply 8% very short, 44% short, 48% adequate. Hay and roughage supplies 19% short, 81% adequate. Most crop conditions below average to average, winter wheat slightly above average.

VIRGINIA: Hot, humid, scattered evening thunderstorms. Temperature 58 to 98°. Rainfall averaged 0.10 to 0.50 in. between 30th and 5th. Some heavy downpours on 6th, some locations received more than 1.00 in.

Days suitable for fieldwork 6.0. Topsoil moisture 5% very short, 44% short, 46% adequate, 5% surplus. Crop conditions very variable, poor to excellent. Corn mostly fair, poor many mountain areas, good southern counties. Corn 76% in or beyond silk stage, 84% 1987, 86% avg.; 40% in or beyond dough stage, 53% 1987, 55% avg.; 18% dent stage or beyond, 37% 1987, 32% avg. Soybeans fair north, good to excellent south. Soybeans 40% in or beyond bloom stage, 53% 1987, 55% avg. Peanuts excellent. Weed, insect, disease control active. Flue-cured tobacco good to excellent. Harvest 11% complete, 4% 1987, 11% avg. Burley tobacco fair, aphid control active. Hay, pastures poor southwest, fair to excellent elsewhere. Peaches 40% harvested. Apples 10% harvested. Potato harvest virtually complete. Hay, roughage supplies 37% short, 46% adequate, 17% surplus.

WASHINGTON: Upper level low over Pacific Northwest ushered in cool ocean air early week, warming trend followed. Temperatures near seasonal normals most areas, gradually warmed to above normal after midweek.

Days suitable for fieldwork 7.0. Soil moisture 65% short, 35% adequate. Favorable weather allowed rapid progress in cereal grain harvest. Winter wheat 50% harvested, 59% 1987, 51% avg. Yields reported generally good. Spring wheat 28% harvested, 52% 1987, 36% avg. Barley 46% harvested, 61% 1987, 47% avg. Concern expressed over moisture levels for fall seeding. Post-harvest field preparation for planting of alfalfa, buckwheat, vegetable seed underway. Potato harvest continued Columbia Basin. Second cutting alfalfa hay winding down, third cutting continued early areas. Hay, other roughage feed supplies 60% adequate, 40% surplus. Stone fruit harvest continued. Few early apples, Bartlett pears picked Benton, Chelan Counties. Raspberry harvest winding down; blueberry, blackberry harvest full swing. Early sweet corn, carrots, other vegetables being harvested. Late season vegetables coming ripe. Range, pasture conditions mostly adequate, some short.

WEST VIRGINIA: Average temperature 78°; 5 to 7° above normal. Extremes 101° Creston, Williamson; 56° Greenbank. Average precipitation 0.66 in.

Days suitable for fieldwork 5.7. Soil moisture 50% very short, 50% short. Corn very poor to fair; 50% silked, 28% dough. Apples, peaches fair. Oats harvest complete. Pasture poor to very poor. Cattle, sheep mostly fair to good. Feed supplies 25% very short, 38% short, 37% adequate. Feed from pasture 77%. Farm activities: General farm maintenance, livestock care, clipping pasture, haying.

WISCONSIN: Extremely hot, temperatures averaged 79°, 8° above normal. Extremes: 50°; 108°. Precipitation 0.30 to 2.80.

Days suitable for fieldwork 5.9. Soil moisture 96% short, 4% adequate. Crop conditions 21% very poor, 54% poor, 22% fair, 3% good; hot, dry days 1st to 4th further stressed crops. Corn condition worse; 21% very poor, 38% poor, 35% fair, 6% good. Irrigated corn or on heavy soils best. Corn 86% silked, 98% 1987, 82% avg. Corn in dough 30%, 36% 1987, 22% avg. Corn in dent 4%, 7% 1987, 1% avg. Oats 75% harvested, 71% 1987, 45% avg; yields low. Barley low bushel weights. Second crop hay 79% cut, 73% 1987, 70% avg. Third crop hay 12% cut, 7% 1987, 4% avg; short height many areas. Early planted soybeans fairly good. Winter wheat 90% harvested, 95% 1987, 75% avg. Pasture condition 25% of normal, 75% 1987, 76% avg. Feed and roughage supplies 41% very short, 56% short, 3% adequate.

WYOMING: Temperatures above normal. Precipitation general. West slightly below normal central and east slightly above.

Days suitable for fieldwork 6.0. Topsoil moisture 84% short, 16% adequate. Subsoil moisture 90% short, 10% adequate. Winter wheat 15% mature, 15% 1987, 20% avg.; 85% harvested, 85% 1987, 80% avg. Barley small amount headed, 10% 1987, 5% avg.; 10% turning color, 10% 1987, 20% avg.; 35% mature, 40% 1987, 40% avg.; 55% harvested, 40% 1987, 35% avg. Spring wheat 10% turning color, 20% 1987, 30% avg.; 30% mature, 35% 1987, 35% avg.; 60% harvested, 40% 1987, 30% avg. Oats 25% turning color, 25% 1987, 30% avg.; 45% mature, 40% 1987, 40% avg.; 30% harvested, 25% 1987, 20% avg. Corn

(Continued to back cover)

# Crop Progress 1/

FOR WEEK ENDING AUGUST 7, 1988

SOYBEANS
% BLOOM

| | 1988 | 1987 | AVG. |
|---|---|---|---|
| ALA | 57 | 61 | 63 |
| ARK | 36 | 66 | 52 |
| GA | 76 | 80 | 71 |
| ILL | 98 | 100 | 94 |
| IND | 96 | 97 | 92 |
| IOWA | 100 | 100 | 94 |
| KANS | 90 | 80 | 65 |
| KY | 72 | 78 | 60 |
| LA | 57 | 74 | 72 |
| MICH | 85 | 96 | 85 |
| MINN | 100 | 99 | 96 |
| MISS | 48 | 64 | 65 |
| MO | 88 | 89 | 77 |
| NEBR | 98 | 96 | 95 |
| N C | 42 | 45 | 45 |
| OHIO | 88 | 100 | 94 |
| S C | 48 | 49 | 44 |
| S DAK | 94 | 95 | 82 |
| TENN | 50 | 76 | 65 |
| 19 STATES | 84 | 89 | 83 |

THESE 19 STATES PRODUCED 96%
OF THE 1987 SOYBEANS CROP.

SOYBEANS
% SETTING PODS

| | 1988 | 1987 | AVG. |
|---|---|---|---|
| ALA | 30 | 31 | 34 |
| ARK | 14 | 37 | 26 |
| GA | 32 | 41 | 36 |
| ILL | 88 | 93 | 66 |
| IND | 46 | 84 | 48 |
| IOWA | 93 | 89 | 72 |
| KANS | 55 | 55 | 30 |
| KY | 24 | 37 | 22 |
| LA | 31 | 48 | 46 |
| MICH | 35 | 60 | 35 |
| MINN | 94 | 91 | 61 |
| MISS | 25 | 29 | 27 |
| MO | 55 | 70 | 49 |
| NEBR | 70 | 70 | 61 |
| N C | 13 | 17 | 17 |
| OHIO | 68 | 85 | 62 |
| S C | 12 | 25 | 17 |
| S DAK | 72 | 68 | 45 |
| TENN | 18 | 39 | 25 |
| 19 STATES | 62 | 71 | 51 |

THESE 19 STATES PRODUCED 96%
OF THE 1987 SOYBEANS CROP.

WINTER WHEAT
% HARVESTED

| | 1988 | 1987 | AVG. |
|---|---|---|---|
| ARK | 100 | 100 | 100 |
| CALIF | 99 | 99 | 99 |
| COLO | 96 | 94 | 91 |
| GA | 100 | 100 | 100 |
| IDAHO | 40 | 19 | 28 |
| ILL | 100 | 100 | 100 |
| IND | 100 | 100 | 100 |
| KANS | 100 | 100 | 100 |
| MICH | 100 | 100 | 95 |
| MO | 100 | 100 | 100 |
| MONT | 93 | 21 | 31 |
| NEBR | 100 | 100 | 99 |
| N MEX | 100 | 100 | NA |
| N C | 100 | 100 | NA |
| OHIO | 100 | 100 | 100 |
| OKLA | 100 | 100 | 100 |
| OREG | 60 | 73 | 63 |
| S DAK | 100 | 94 | 90 |
| TEX | 100 | 100 | 100 |
| WASH | 50 | 59 | 51 |
| 20 STATES | 95 | 90 | NA |
| EXCL. STATES WITH NA | 94 | 90 | 90 |

THESE 20 STATES PRODUCED 91%
OF THE 1987 WINTER WHEAT CROP.

NA - NOT AVAILABLE.

COTTON
% SETTING BOLLS

| | 1988 | 1987 | AVG. |
|---|---|---|---|
| ALA | 97 | 99 | 93 |
| ARIZ | 97 | 99 | 98 |
| ARK | 99 | 100 | 98 |
| CALIF | 95 | 100 | 87 |
| GA | 100 | 98 | 95 |
| LA | 91 | 96 | 93 |
| MISS | 95 | 100 | 88 |
| MO | 100 | 100 | 94 |
| N MEX | 90 | 91 | 84 |
| N C | 83 | 90 | 83 |
| OKLA | 70 | 50 | 40 |
| S C | 70 | 89 | 92 |
| TENN | 91 | 96 | 82 |
| TEX | 75 | 76 | 67 |
| 14 STATES | 85 | 86 | 78 |

THESE 14 STATES PRODUCED 100%
OF THE 1987 COTTON CROP.

COTTON
% BOLLS OPENING

| | 1988 | 1987 | AVG. |
|---|---|---|---|
| ALA | 5 | 4 | 2 |
| ARIZ | 25 | 25 | 14 |
| ARK | 0 | 0 | 1 |
| CALIF | 5 | 5 | 1 |
| GA | 3 | 3 | 5 |
| LA | 3 | 3 | 6 |
| MISS | 2 | 1 | 0 |
| MO | 0 | 7 | 1 |
| N MEX | 0 | 0 | 9 |
| N C | 0 | 0 | 0 |
| OKLA | 0 | 0 | 0 |
| S C | 0 | 0 | 0 |
| TENN | 0 | 2 | 1 |
| TEX | 11 | 9 | 8 |
| 14 STATES | 7 | 6 | 5 |

THESE 14 STATES PRODUCED 100%
OF THE 1987 COTTON CROP.

SPRING WHEAT
% HARVESTED

| | 1988 | 1987 | AVG. |
|---|---|---|---|
| IDAHO | 25 | 19 | 9 |
| MINN | 63 | 58 | 24 |
| MONT | 46 | 2 | 5 |
| N DAK | 78 | 20 | 13 |
| S DAK | 99 | 85 | 51 |
| 5 STATES | 71 | 33 | 19 |

THESE 5 STATES PRODUCED 95%
OF THE 1987 SPRING WHEAT CROP.

GRAIN SORGHUM
% HEADED

| | 1988 | 1987 | AVG. |
|---|---|---|---|
| ARK | 77 | 95 | NA |
| ILL | 75 | 95 | NA |
| KANS | 35 | 50 | 30 |
| LA | 84 | 93 | 94 |
| MISS | 87 | 95 | 86 |
| MO | 73 | 88 | 73 |
| NEBR | 75 | 81 | 63 |
| OKLA | 50 | 60 | 45 |
| S DAK | 68 | 70 | 39 |
| TENN | 77 | 89 | 83 |
| TEX | 72 | 87 | 78 |
| 11 STATES | 58 | 71 | NA |
| EXCL. STATES WITH NA | 57 | 70 | 54 |

THESE 11 STATES PRODUCED 96%
OF THE 1987 GRAIN SORGHUM CROP.

NA - NOT AVAILABLE.

GRAIN SORGHUM
% COLORING

| | 1988 | 1987 | AVG. |
|---|---|---|---|
| ARK | 23 | 64 | NA |
| ILL | 0 | NA | NA |
| KANS | 3 | 5 | 2 |
| LA | 31 | 49 | 65 |
| MISS | 37 | 59 | 57 |
| MO | 21 | 37 | 30 |
| NEBR | 2 | 0 | 0 |
| OKLA | 25 | 25 | 15 |
| S DAK | 7 | 0 | 0 |
| TENN | 25 | 39 | 29 |
| TEX | 60 | 59 | 63 |
| 11 STATES | 22 | NA | NA |
| EXCL. STATES WITH NA | 22 | 24 | 23 |

THESE 11 STATES PRODUCED 96%
OF THE 1987 GRAIN SORGHUM CROP.

NA - NOT AVAILABLE.

RICE
% HEADED

| | 1988 | 1987 | AVG. |
|---|---|---|---|
| ARK | 29 | 73 | 48 |
| CALIF | 10 | 15 | 14 |
| LA | 73 | 82 | 80 |
| MISS | 40 | 76 | 64 |
| TEX | 99 | 98 | 94 |
| 5 STATES | 43 | 68 | 55 |

THESE 5 STATES PRODUCED 97%
OF THE 1987 RICE CROP.

CORN % SILKING

| | 1988 | 1987 | AVG. |
|---|---|---|---|
| COLO | 77 | 74 | 70 |
| GA | 100 | 100 | 100 |
| ILL | 99 | 100 | 99 |
| IND | 98 | 100 | 93 |
| IOWA | 100 | 100 | 96 |
| KANS | 100 | 97 | 90 |
| KY | 93 | 99 | 86 |
| MICH | 85 | 97 | 85 |
| MINN | 100 | 99 | 93 |
| MO | 100 | 100 | 93 |
| NEBR | 99 | 98 | 93 |
| N C | 98 | 96 | 97 |
| OHIO | 88 | 100 | 92 |
| PA | 60 | 86 | 70 |
| S DAK | 87 | 94 | 76 |
| TEX | 99 | 100 | 99 |
| WIS | 86 | 98 | 82 |
| 17 STATES | 95 | 98 | 92 |

THESE 17 STATES PRODUCED 94% OF THE 1987 CORN CROP.

CORN % DOUGH

| | 1988 | 1987 | AVG. |
|---|---|---|---|
| COLO | 18 | 8 | 12 |
| GA | 98 | 100 | 99 |
| ILL | 70 | 85 | 63 |
| IND | 32 | 87 | 49 |
| IOWA | 46 | 56 | 29 |
| KANS | 60 | 70 | 40 |
| KY | 30 | 67 | 40 |
| MICH | 2 | 45 | 20 |
| MINN | 31 | 50 | 14 |
| MO | 76 | 89 | 65 |
| NEBR | 30 | 44 | 30 |
| N C | 79 | 74 | 81 |
| OHIO | 36 | 80 | 49 |
| PA | 5 | 30 | 15 |
| S DAK | 35 | 43 | 12 |
| TEX | 82 | 94 | 87 |
| WIS | 30 | 36 | 22 |
| 17 STATES | 43 | 62 | 39 |

THESE 17 STATES PRODUCED 94% OF THE 1987 CORN CROP.

CORN % DENT

| | 1988 | 1987 | AVG. |
|---|---|---|---|
| COLO | 0 | 0 | 0 |
| GA | 92 | 96 | 92 |
| ILL | 20 | 44 | 22 |
| IND | 1 | 36 | 9 |
| IOWA | 14 | 25 | 8 |
| KANS | 20 | 25 | 10 |
| KY | 10 | 32 | 16 |
| MICH | 0 | 10 | 2 |
| MINN | 1 | 11 | 2 |
| MO | 38 | 61 | 38 |
| NEBR | 0 | 0 | 2 |
| N C | 51 | 50 | 58 |
| OHIO | 3 | 22 | 4 |
| PA | 0 | 0 | 0 |
| S DAK | 4 | 0 | 0 |
| TEX | 66 | 71 | 68 |
| WIS | 4 | 7 | 1 |
| 17 STATES | 12 | 25 | 12 |

THESE 17 STATES PRODUCED 94% OF THE 1987 CORN CROP.

1/ AVERAGES FOR THESE SUMMARIES ARE FOR THE YEARS 1983 - 1987.

## Crop Condition

FOR WEEK ENDING AUGUST 7, 1988

CORN

| STATE | VP | P | F | G | EX |
|---|---|---|---|---|---|
| COLO | 0 | 1 | 12 | 63 | 24 |
| GA | 3 | 29 | 49 | 17 | 2 |
| ILL | 20 | 47 | 30 | 3 | 0 |
| IND | 16 | 41 | 39 | 4 | 0 |
| IOWA | 21 | 39 | 32 | 8 | 0 |
| KANS | 6 | 21 | 11 | 48 | 14 |
| KY | 12 | 42 | 38 | 8 | 0 |
| MICH | 20 | 28 | 35 | 15 | 2 |
| MINN | 34 | 40 | 26 | 0 | 0 |
| MO | 29 | 39 | 24 | 7 | 1 |
| NEBR | 0 | 10 | 21 | 54 | 15 |
| N C | 1 | 11 | 41 | 39 | 8 |
| OHIO | 26 | 33 | 33 | 8 | 0 |
| PA | 17 | 32 | 34 | 14 | 3 |
| S DAK | 18 | 39 | 34 | 8 | 1 |
| TEX | 0 | 5 | 34 | 39 | 22 |
| WISC | 21 | 38 | 35 | 6 | 0 |
| 17 STATE | 18 | 33 | 31 | 15 | 3 |

COTTON

| STATE | VP | P | F | G | EX |
|---|---|---|---|---|---|
| ALA | 11 | 32 | 38 | 14 | 5 |
| ARIZ | 0 | 0 | 0 | 80 | 20 |
| ARK | 0 | 0 | 11 | 79 | 10 |
| CALIF | 0 | 0 | 15 | 65 | 20 |
| GA | 0 | 27 | 48 | 25 | 0 |
| LA | 0 | 0 | 68 | 32 | 0 |
| MISS | 0 | 5 | 50 | 45 | 0 |
| MO | 0 | 0 | 30 | 60 | 10 |
| N MEX | 0 | 0 | 49 | 38 | 13 |
| N C | 0 | 5 | 18 | 65 | 12 |
| OKLA | 0 | 0 | 0 | 100 | 0 |
| S C | 0 | 4 | 23 | 73 | 0 |
| TENN | 0 | 2 | 20 | 74 | 4 |
| TEX | 1 | 1 | 23 | 64 | 11 |
| 14 STATE | 1 | 2 | 28 | 60 | 9 |

SOYBEANS

| STATE | VP | P | F | G | EX |
|---|---|---|---|---|---|
| ALA | 0 | 15 | 35 | 38 | 12 |
| ARK | 1 | 7 | 57 | 35 | 0 |
| GA | 2 | 14 | 53 | 31 | 0 |
| ILL | 4 | 32 | 55 | 8 | 1 |
| IND | 2 | 30 | 47 | 21 | 0 |
| IOWA | 6 | 36 | 48 | 10 | 0 |
| KANS | 0 | 9 | 27 | 36 | 28 |
| KY | 1 | 3 | 62 | 34 | 0 |
| LA | 0 | 14 | 33 | 53 | 0 |
| MICH | 10 | 15 | 35 | 35 | 5 |
| MINN | 23 | 39 | 34 | 4 | 0 |
| MISS | 0 | 40 | 35 | 25 | 0 |
| MO | 13 | 30 | 40 | 16 | 1 |
| NEBR | 0 | 10 | 50 | 37 | 3 |
| N C | 2 | 4 | 23 | 61 | 10 |
| OHIO | 14 | 28 | 42 | 15 | 1 |
| S C | 0 | 8 | 38 | 54 | 0 |
| S DAK | 2 | 22 | 46 | 28 | 2 |
| TENN | 2 | 10 | 55 | 33 | 0 |
| 19 STATE | 6 | 26 | 45 | 21 | 2 |

GRAIN SORGHUM

| STATE | VP | P | F | G | EX |
|---|---|---|---|---|---|
| ARK | 0 | 13 | 36 | 48 | 3 |
| ILL | 0 | 13 | 51 | 36 | 0 |
| KANS | 0 | 18 | 28 | 47 | 7 |
| LA | 0 | 12 | 46 | 42 | 0 |
| MISS | 0 | 25 | 55 | 20 | 0 |
| MO | 7 | 15 | 46 | 31 | 1 |
| NEBR | 0 | 7 | 66 | 27 | 0 |
| OKLA | 0 | 0 | 30 | 70 | 0 |
| S DAK | 6 | 8 | 55 | 31 | 0 |
| TENN | 3 | 10 | 62 | 25 | 0 |
| TEX | 0 | 4 | 31 | 48 | 17 |
| 11 STATE | 1 | 11 | 38 | 43 | 7 |

RICE

| STATE | VP | P | F | G | EX |
|---|---|---|---|---|---|
| ARK | 0 | 4 | 47 | 49 | 0 |
| CALIF | 0 | 0 | 10 | 85 | 5 |
| LA | 0 | 1 | 40 | 57 | 2 |
| MISS | 0 | 0 | 50 | 50 | 0 |
| TEX | 0 | 0 | 12 | 74 | 14 |
| 5 STATE | 0 | 2 | 36 | 59 | 3 |

VP - VERY POOR P - POOR F - FAIR
G - GOOD EX - EXCELLENT

# International Weather and Crop Summary

July 31 - August 6, 1988

HIGHLIGHTS

USSR ... In Western USSR, dry weather in the eastern Ukraine, the North Caucasus, the Volga, and the southern Volga Vyatsk helps harvesting. In the New Lands, showers and cooler weather in West Siberia improve conditions for spring grains in the filling stage.

EUROPE ... Heat and dryness continue to stress summer crops in the southeast. Beneficial drier weather develops in the northwest.

SOUTH ASIA ... Drier than normal weather continues over the southern interior. Locally heavy rain in northern Pakistan increases flooding.

EASTERN ASIA ... Hot, dry weather stresses crops in central China and Manchuria. Beneficial rains continue over the south and west.

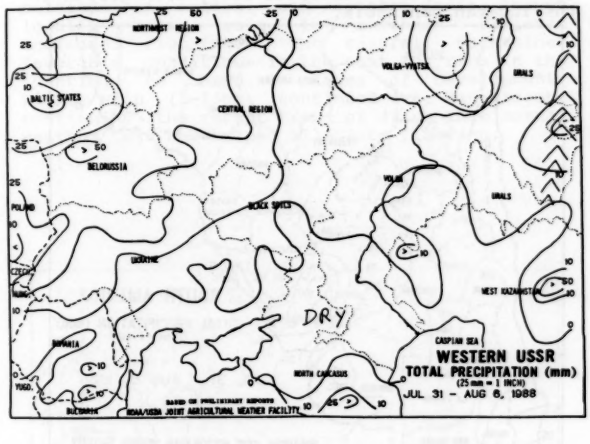
SOUTHEAST ASIA ... Widespread showers across Thailand benefit immature crops but delay corn harvesting.

SOUTH AMERICA ... Mostly dry weather continues over wheat areas of Argentina and south-central Brazil. Locally heavy rain falls in Uruguay.

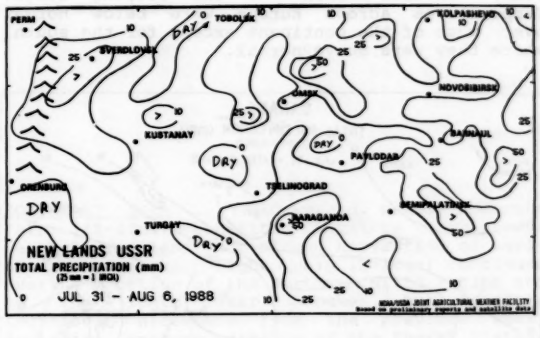
AUSTRALIA ... Moderate to heavy rain continues in southern Victoria. Light to moderate rain favors previously dry areas of Queensland and New South Wales.

MEXICO ... Widespread rain benefits crop growth.

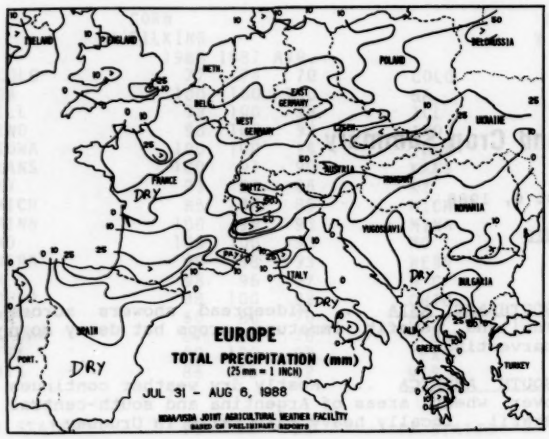
CANADA ... Variable rain and cooler weather across the Prairies bring some relief to late planted immature crops, but hot weather returns by week's end.



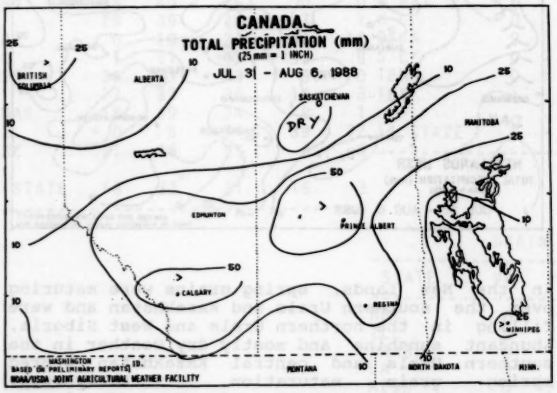

USSR ... In Western USSR, early week dry weather in the Baltic States, Belorussia, the western and northern Ukraine, and the Central Region helped winter and spring grain harvesting. By week's end, a strong frontal system produced 14-40mm of rain over most of the areas, causing harvest delays. Mostly dry weather in the southern and eastern Ukraine, the North Caucasus, Black Soils Region, the Volga, and the southern Volga Vyatsk Region allowed harvest to progress without delay. Ahead of the front, hot weather spread northward covering the southern and eastern Ukraine, the North Caucasus, and the lower Volga by week's end. Highest temperatures occurred on August 6, when maximum temperatures ranged from 32 to 35 degrees Celsius, stressing corn and sunflowers in the filling stage.



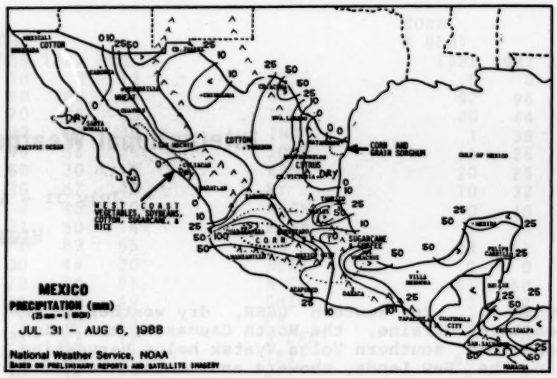

In the New Lands, spring grains were maturing over the southern Urals and Kazakhstan and were filling in the northern Urals and West Siberia. Abundant sunshine and mostly dry weather in the southern Urals and central Kazakhstan favored spring grain maturation. Early-week, unseasonably warm weather in West Siberia was replaced by showers and cooler weather, improving conditions for spring grains in the filling stage. Precipitation amounts in West Siberia ranged from 10 to 30mm, with isolated locations receiving rainfall in excess of 50mm. Average weekly temperatures were 1-3 degrees C below normal in Kazakhstan and the eastern portion of the northern Urals, and near to above normal in the southern Urals and West Siberia.




EUROPE ... Hot, dry weather continued to stress reproductive to filling summer crops in southeastern Europe for much of the week, although a frontal system brought relief with cooler temperatures and scattered light to moderate rain (5-20mm) in much of Hungary, northern Yugoslavia, and northern Romania by week's end. Light to moderate rain (5-20mm, with isolated amounts greater than 25mm) favored summer crops over the remainder of eastern Europe. Light rain (less than 10mm) fell over northwestern growing areas early, followed by beneficial drier weather. Persistent wetness over the past 3-4 weeks has caused numerous delays in winter grain harvest from northern France and eastern England to western Poland. In southwestern France, moderate to heavy rain (15-25mm, with isolated amounts greater than 30mm) favored corn in the filling stage. Temperatures across Europe were below normal over most of the continent except for the south, where they were above normal.

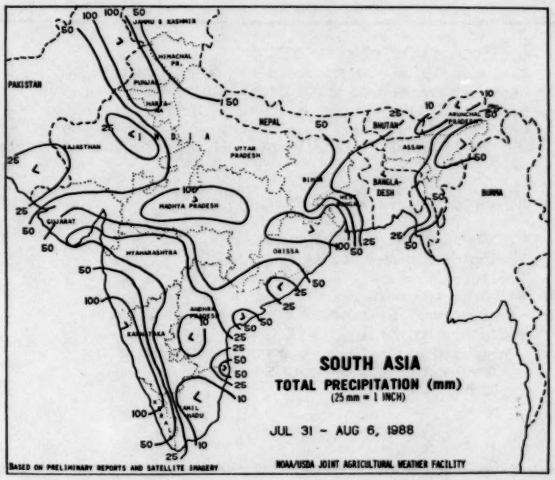



CANADA ... Moderate to heavy rain (25-50mm or more) covered a large portion of the western Prairies from central Alberta and central Saskatchewan northward, with lighter rain (1-25mm) falling elsewhere. The rain and cooler weather brought some relief to late planted, immature crops in Saskatchewan stressed by early-week hot weather. However, high temperatures returned to the eastern Prairies by week's end. Early planted spring wheat is maturing across Canada, with harvesting underway across the south.



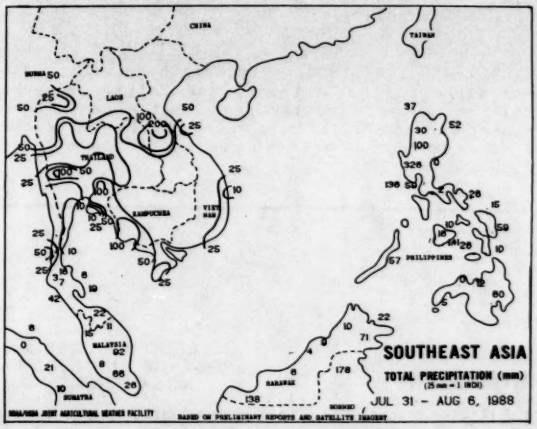

MEXICO ... Widespread showers continued to benefit crop growth throughout most areas. Rain in the northwest helped irrigation reserves, especially for crops along the west coast farming region where mostly dry weather prevailed. Showers in the north-central region favored grazing areas and late maturing cotton. Some early cotton harvesting is likely underway. Minimal rain in the northeast favored grain and vegetable harvesting. In the Southern Plateau, moisture continues favorable for corn development. Weekly rainfall averaged 50-125mm in the west, while amounts diminished to less than 10mm in the eastern one-third of the Plateau. Heavier showers (25-58mm) fell near Valles and Veracruz. Substantial tropical rain (19-50mm or more) benefited early corn growth in the Yucatan peninsula.

SOUTH AMERICA ... Locally heavy showers and thunderstorms developed over Uruguay, producing 50-110mm of weekly rainfall. However, scattered, light showers produced only minimal rainfall over Argentina's major wheat areas. Some beneficial showers (10-20mm) fell in northern Santa Fe, but the prolonged winter drought continues over central Argentina. Wheat planting, which lags well behind the normal pace, has increased recently with late July rain in some areas. In south-central Brazil, showers fell over southern Rio Grande do Sul, producing 10-48mm of rain for the week. However, rainfall diminished rapidly over northern Rio Grande do Sul, and dry weather prevailed throughout the remainder of the region, extending into the coffee areas of Minas Gerais. The drying trend of the past several weeks has reduced topsoil moisture in the wheat growing areas.


SOUTH ASIA
TOTAL PRECIPITATION (mm)
(25 mm = 1 INCH)
JUL 31 - AUG 6, 1988
BASED ON PRELIMINARY REPORTS AND SATELLITE IMAGERY
NOAA/USDA JOINT AGRICULTURAL WEATHER FACILITY

SOUTH ASIA ... Scattered, light to moderate rain (2-26mm) covered crop regions of India's southern interior from central Maharashtra to Tamil Nadu. This season's drier than normal weather has limited moisture over portions of the south, especially Karnataka and Tamil Nadu, for the normal development of grains and groundnuts, usually in or nearing reproduction in early August. Elsewhere, moderate to heavy showers (25-100mm or more) maintained generally favorable conditions for vegetative grains and oilseeds in central and northern India, though locally heavy rain in northern Pakistan increased flooding. The rainfall maintained favorable conditions in the east for rice in the jointing to heading stages of development. Light rain (1-16mm) continued over Bangladesh, continuing the recent trend of drier than normal weather that has helped alleviate flooding.

EASTERN ASIA ... Hot, dry weather returned to much of the lower Yangtze River Valley and developed over Manchuria, with high temperatures exceeding 35 degrees F over both areas by week's end. The heat stressed summer crops, vegetative to filling single crop rice, and, in the lower Yangtze Valley, early vegetative late crop rice. In western and southern growing areas, widespread rain (5-50mm, with scattered amounts in excess of 50mm) continued to benefit spring sown and recently planted secondary crops. Early-week, moderate to heavy rain (15-25mm, with scattered amounts greater than 40mm) favored late planted summer crops across northern growing areas from Gansu to Heilongjiang but slowed drydown of spring wheat, which is nearing harvest. North and South Korea remained mostly dry. Mean temperatures for the week ranged from much above normal in northeastern and central crop areas to near normal elsewhere.




SOUTHEAST ASIA ... Widespread, mostly moderate rain (19-49mm) benefited immature corn across central Thailand but slowed harvesting of early planted crops. Light rain (8-16mm) continued over a portion of the Northern Hills region and to the south near Bangkok, but rainfall increased elsewhere from the previous week, including eastern portions of the Khorat Plateau which had recently been trending dry. Thai rice is usually in the jointing to heading stage of development by early August. Rainfall increased from the previous week elsewhere in Indochina, with heavy rain (92-128mm) over rice regions of northern Vietnam. In the Philippines, excessive rain (100-328mm) continued over east-central Luzon, but moderate to heavy rain (25-100mm) benefited grains over northern Luzon and Mindanao.

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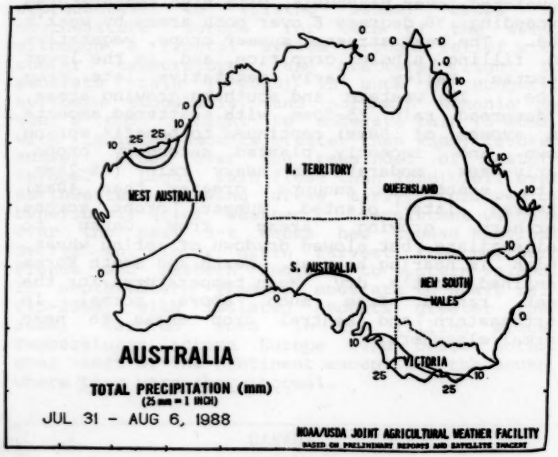


**AUSTRALIA** ... Moderate to heavy rains (15-25mm) continued in southern Victoria, keeping soils excessively wet. Light to moderate rain (5-20mm) fell over sections of southern Queensland and northern New South Wales, favoring soil moisture levels which have been unfavorably low for semi-dormant winter grains. Mostly light rain (less than 10mm) covered the remainder of the wheat growing areas. In eastern Queensland, scattered coastal showers (5-15mm) caused only minor delays in sugarcane harvest. Mean weekly temperatures were much above normal in crop areas of Queensland and normal to above normal elsewhere.

(Continued from p.22)
80% tasseled, 85% 1987, 85% avg.;60% silked, 55% 1987, 60% avg.; 10% milk, 20% 1987. Dry beans most in bloom, 90% 1987, 85% avg.; 75% setting pods, 70% 1987, 75% avg. Potatoes 95% bloom, 95% 1987, 90% avg. Alfalfa second cutting 50% complete, 45% 1987, 40% avg. Other hay 80% harvested, 80% 1987, 70% avg. Ranges, pastures poor to fair. Livestock feed obtained from pastures 90%. Stock water 75% short. Hay, roughage supplies 5% very short, 65% short, 30% adequate.

(Continued from p.16)
Valley. California vegetable harvest consisted mostly of artichokes, broccoli, cauliflower, carrots, celery, lettuce, and melons. Strawberry supplies declined seasonally along the central coast. Preparation of fields for fall vegetables was underway in western Arizona.

PASTURES AND LIVESTOCK: Pastures began responding to moisture in the Southeast and Delta. However, condition remained mostly poor in the central and northern Great Plains and Corn Belt. Livestock was fair to good. Heat stress caused some losses in Iowa.

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